

## MINUTES OF THE WASATCH CITY-COUNTY BOARD OF HEALTH

July 22, 1986

12:10 P.M.

County Services Complex

## Present were:

Calvin Giles	Chairman
Elizabeth Murdock	Vice-chairman
Lynn Webster	Member
R. Raymond Green, I.D.	Medical Officer
R. C. Tadd	Commissioner
Jeff Bradshaw	Ex-officio member
Phil D. Wright, M.D., R.S.	Health Officer
Robert Blanthorn, ISW	Alcohol/Drug Director
Maxine Oakeson, R.N.	Nurse Supervisor
Maren Durtschi, R.N.	Nurse
Ranae Williams, M.D., R.D.	Nutritionist/Educator
Nelda Duke	Secretary

## Guests:

Patty Tucker  
Dee Call Snake Creek Homeowners Assn.  
Marvis Mahoney Strawberry Lake Estates

Welcome: Mr. Giles welcomed those present and called the meeting to order.

Opening Prayer: Commissioner Tadd offered the invocation.

School Health: Mrs. Durtschi stated she had attended a conference on school health and received alot of helpful information. She submitted a copy of a letter regarding the formulation of a school health advisory Committee. (See copy #1) She also stated kindergarten registration is an ongoing summer program and there are still several kindergarten children to be registered for school.

Seat Belts: Mrs. Williams stated the seat belt program is going very well. The State is sponsoring a spot check on seat belts on August 1st.

WIC Mrs. Williams reported we now have 339 clients on our WIC program. Our WIC audit went very well but one deficiency was the lack of a follow up visit to meet our secondary contract needs. We have therefore requested one more WIC day to meet this need.

Immunization: Mrs. Oakeson reported we have given 91 immunizations this month. This is slightly below last years average.

Hypertension: Mrs. Oakeson stated she is monitoring two patients with high blood pressure. It was suggested she encourage them to see their private physician.

Well Child Clinics: Mrs. Oakeson stated we had only one well child clinic this month and saw 11 children. She also said the doctors have found several children with problems.

Vaccine Cost: Mrs. Murdock mentioned the cost of DPT vaccine has risen from \$65 to \$200 per vial so we may see an increase in our clinic attendance.

Nurse Recruitment: Mr. Wright stated we have three applicants and one person called regarding our nurse recruitment. We have sent a circular to the state health and job service. The state will review and rank the applications. We would like to interview in August.

Snake Creek Water: Mr. Lee Call of the Snake Creek Water Users Association asked the board what the present status of their water system was. Mr. Wright said they had a problem with a mud slide and water pressure and as soon as the system is corrected and approved they will allow ten new connections.

Strawberry Lake Estates: Mr. Marvis Mahoney of the Strawberry Lake Estates said he had 3/4 of his water system installed and has sold several lots and the buyers are anxious to get approval so they can build. He asked if the board could give a conditional approval before the water system is completely installed. He also asked if we would activate the county's certificate of occupancy. After some discussion Dr. Green made a motion we table this request until we can study and get more information on the problem. Mrs. Murdock seconded the motion. Motion carried. Mr. Giles suggested the board meet with Attorney Tesch and get back to Mr. Mahoney within two weeks.

Forest Service Complex: Mr. Wright stated the Forest Service had some problems with the complex they are building south of Heber. They let a bid out before approval of wastewater and sewage disposal. The percolation test was too fast so they have proposed to bring in fill to meet requirements. Bids were also let before the water well was installed so they have to secure a back-up system in case they cannot get water. They have secured back-up water from the Heber East Stake Center well.

Mayflower Mine Tailings: Mr. Wright stated the Mayflower Mine Tailings have been taken off the National Priority List.

Daniel Summit Estates: Mr. Wright said there is a 16 lot subdivision being planned for Daniels Summit. The water system is now being reviewed by the State.

Mobile Home Status: Mr. Wright said we had received some complaints about the mobil home status in our county. Our responsibility as a health department is to check water and wastewater facilities. If these meet our requirements they get our approval and are sent to the planning and building departments.

Complaint: Current Creek Mr. Wright said we had received a complaint regarding sewage surfacing at Current Creek Lodge. He made an inspection and found this to be the case. He gave an order to both the cafe and service station to clean it up by August 1st. The system was installed without the approval of our department so he told them to dig it up.

Keetley Water System: Mr. Wright said the Keetley Water System is under order from the Attorney General's Office to bring their system into compliance. Grant Ward is meeting with the attorney general this week.

Strawberry Water Users: Mr. Wright stated the Strawberry Water Users want to put in a development at the old Bill's Snack Bar in Strawberry. There is a high water problem so they will have to do the same as the forest service. They will also have to get state approval as it is a public water system.

Dead Animal Disposal: Mr. Giles stated Junior Keeling has gone out of the dead animal disposal business. There have been several dead animals dropped at the land fill recently. As there are so many animals in our county this poses a critical problem.  
After some discussion it was decided that Mr. Wright and Mr. Giles visit Mr. Keeling within the week and discuss the problem and report back to the board.

Alcohol/Drug Report: Mr. Blanthorn stated they had just finished a retreat with some high school students and it was very successful. He was asked what his success rate of treatment was and he said 25 to 30% but 60% gets some positive results. Dr. Green commended Mr. Blanthorn for his good work. Mr. Blanthorn reported the prevention specialist (Coral Mangus) will be leaving the end of August for other employment. He would like to get a replacement as soon as possible so they can get the program in place before school starts.

Liability Insurance: Mr. Wright said the state is doing an insurance survey and will be checking our liability coverage.

By-Laws: The By-Laws were discussed.

Next Meeting: The next meeting was scheduled for August 18, 1986.

Meeting adjourned at 2:25 P.M.

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Chairman



Norman H. Banger  
Governor

Suzanne Dandoy, M.D., M.P.H.  
Executive Director

June 18, 1986

Maxine McAfee, Nursing Director  
Wasatch City-County Health Dept.  
805 West 100 South, PO Box 246  
Heber City, Utah 84032

Dear Maxine:

This year, in conjunction with my site visits I would like to assist in the development of local school health advocacy councils. Membership on such councils could include representatives from:

parent organizations (PTA)	pediatric/family health care providers
public health	juvenile court
DFS - Social Services	mental health
teacher representatives	student
school district administration	legislators
pupil services coordinator	civic leaders
school nurse(s)	

Members should be committed to addressing the health care needs of your community's school-age population. Objectives for the council will include:

- 1) To serve in an advisory fashion to local school health service providers in examining local needs and establishing priorities in school health activities.
- 2) To speak out as advocates for students to receive comprehensive school health services.
- 3) To monitor availability of local school health services/resources and evaluate local needs.

The establishment of such councils should provide a local resource to assist in the evaluation and planning of school health services. Furthermore, they will provide the necessary "grass roots" support needed for the passage of legislation to fund school nursing at adequate ratios.

Please consider coordinating a one hour meeting for prospective council members in conjunction with my site visit. I will be happy to conduct the meeting if you invite the appropriate local representatives.

Please call soon to schedule site visits between July 22nd and September 25th. Thank you.

Sincerely,

KATHLEEN STILLION-ALLEN, R.N., M.S., F.N.C.  
School Health Nursing Consultant  
2870/sk  
cc: Mr. Phil Wright



By-Laws of the  
WASATCH CITY-COUNTY BOARD OF HEALTH

Article I

NAME/LOCATION

- 1.1 The name of this organization shall be the Wasatch City-County Board of Health, hereinafter referred to as the Board.
- 1.2 The headquarters of the Board shall be located at the Wasatch County Service Complex, 805 West 100 South, P. O. Box 246, Heber City, Utah 84032.

Article II

LEGAL BASIS/AUTHORITY

- 2.1 The Board is organized pursuant to Title 26, Chapter 24, "Local Health Department Act," Sections 26-24-1 through 26-24-24 of the Utah Code Annotated 1953 and recodified in 1981 and shall have health authority throughout Wasatch County.
- 2.2 The Board shall adopt and implement, where applicable, Sections 26-15-1 through 26-15-12, Title 26, Chapter 15 of the Utah Code Annotated 1953 as well as the articles specified in these By-laws and other applicable actions of the Utah State Department of Health.
- 2.3 The Wasatch City-County Health Department, hereinafter referred to as the Health Department, was established January 8, 1982, based on "A Resolution Establishing The Wasatch City-County Health Department And Board Of Health To Operate Within All Of Wasatch County" (Resolution No. 82-2).

### Article III

#### POWERS AND DUTIES

- 3.1 The general purpose of the Board shall be to organize a department of health and oversee the administration of the department, determining and adopting policies that are harmonious with the practice of public health.
- 3.2 The Board shall determine the general policies to be followed in administration of the Health Department. The Health Department shall be responsible for providing, directly or indirectly, basic public health services consisting of but not limited to public health administration and support services, maternal and child health, communicable disease control, surveillance, epidemiology, health education, food protection, solid waste management, waste water management, and safe drinking water management.
- 3.3 The Board and Health Department shall have and exercise, in addition to all other powers and duties imposed on it by law, the powers and duties as outlined in Section 26-24-14.
- 3.4 A health officer (director of health) shall be appointed by the Board, subject to ratification by the participating local governing bodies, which shall also approve the compensation proposed by the Board for the health officer. The health officer shall be the administrative and executive officer of the Health Department and shall devote full time to the duties of that office. The director shall be the executive secretary for the Board as shall be a nonvoting, ex officio member of the Board. Passage of these by laws confirms the appointment of Phil D. Wright as health officer pursuant with this section.
- 3.5 The Board may adopt rules, regulations, and standards, not in conflict with rules of the Utah State Health Department, necessary for the promotion of public health, environmental health quality, injury control, and the prevention of outbreaks and spread of communicable and infectious diseases, that shall have the effect of law. Such rules, regulations, and standards when adopted shall supersede existing local rules, regulations, standards, and ordinances pertaining to similar subject matter.

- 3.6 The Board shall provide public hearings prior to the adoption of any rule, regulation, or standard. Notice of any such public hearing shall be published at least twice in a newspaper of general circulation in the area within the jurisdiction of the Health Department.
- 3.7 The hearing may be conducted by the Board at a regular or special meeting, or the Board may appoint hearing officers, who shall have power and authority to conduct hearings in the name of the Board at a designated time and place. A record or summary of the proceedings of any hearing shall be taken and filed with the Board, together with findings of fact, conclusions of law, and the order of the Board or hearing officer. In any hearing a member of the Board or the hearing officer shall have power to administer oaths, examine witnesses, and issue notice of the hearings or subpoenas in the name of the Board requiring the testimony of witnesses and the production of evidence relevant to any matter in the hearing.
- 3.8 Any person aggrieved by any action or inaction of the Health Department shall have an opportunity for an informal hearing with the health officer or a designated representative of the Health Department. Further hearings before the Board shall be granted upon request in writing.
- 3.9 Judicial review of a final determination of the Board may be secured by any person adversely affected thereby, or by the Utah State Health Department, by filing a petition in the district court within 30 days after receipt of notice of the Board's final determination. The petition, which shall be served upon a member of the Board shall state the grounds upon which review is sought. The Board, in its answer, shall certify and file with the court all documents and papers and a transcript of all testimony taken in the matter, together with its findings of fact, conclusions of law, and order. The appellant and the Board shall be parties to the appeal. The Utah State Health Department may become a party by intervention as in a civil action upon showing cause therefore.

## Article IV

### BOARD MEMBERSHIP AND OFFICERS

- 4.1 The Board shall consist of at least seven (7) members to be appointed by the County Commission, City, and Town Councils on a nonpartisan basis as follows:

Two Members by Heber City  
Two Members by Wasatch County  
One Member by Midway City  
One Member by Wallsburg  
One Member by Charleston

Current Board Members as of May 1986:

	<u>Termination Date</u>
Rulon Phillips	09/86
Calvin Giles	09/87
R. C. Tadd	09/88
Connie Tatton	09/88
Elizabeth Murdock	09/89
R. R. Green, M.D.	09/90
Lynn Webster	09/90

All provisions of Section 26-24-9 of the Utah Code Annotated 1953 and recodified, 1981, relative to the composition, qualifications, appointments, and terms of appointment shall be observed in the selection of members to the Board.

- 4.2 The Board shall be informed at least three months prior to the expiration of the term of a board member. Terms of appointment shall expire on the fifth anniversary of the date of appointment.
- 4.3 The chairman and chairman-elect of the Board shall be elected at the September Board meeting by a majority vote of the members and serve a term beginning on the date of the October Board meeting for a period of one year each. Subsequently, a chairman-elect shall be elected annually at the September Board meeting and take office at the October Board meeting.

The chairman shall preside over and conduct all meetings and act as the legal representative of all Board transactions. In the absence of the chairman, the chairman-elect shall preside. The chairman and chairman-elect shall perform such other duties as may be prescribed by the Board.

- 4.4 Any Board member who fails to attend three consecutive Board meetings without giving prior notice to the health department of his or her intent not to attend and the reasons therefore, shall be presumed to have resigned from the Board and the Board, by majority vote, may declare his Board membership terminated and shall request the appropriate participating local governing body to appoint a new Board member to fill that vacancy.

## Article V

### MEETINGS

- 5.1 The Board shall meet at least once every three months on the third Monday of the month at 12:00 p.m., unless otherwise scheduled. Meetings will be held at the Wasatch County Services Complex, 805 West 100 South, Heber City, Utah unless notification is given to each member of the Board of the change of time and place.
- 5.2 Special meetings may be called by the chairman, the health officer, or by a majority of the members of the Board upon 72 hours notice, or in case of emergency, as soon as possible after notification of Board members.
- 5.3 All meetings shall comply with the open meeting law of the State of Utah: Title 52, Chapter 4, "Open and Public Meetings," sections 52-4-1 through 52-4-9.
- 5.4 A majority of the members of the Board shall constitute a quorum, and the action of the majority of the members present shall be the action of the Board.
- 5.5 Under conditions of bad weather or disasters, the Board chairman or his/her designee may secure action approval by a telephone poll of all available members. The action of the majority of those polled shall be the action of the Board.

## Article VI

### PROCEDURES/COMMITTEES

- 6.1 Meetings shall be conducted generally in keeping with Robert's Rules of Order, but shall be as informal as is appropriate to the situation.
- 6.2 Ad hoc and standing committees of the Board shall be appointed by the chairman. Examples of standing committees: Home Health Advisory, Nominating.

## Article VII

### AMENDMENTS

- 7.1 These By-Laws may be amended at any regular meeting of the Board by a majority vote of the members of the Board. Written copies of the proposed amendments shall be provided to all Board members. The adoption of amendments shall be stated in the agenda of the meeting at which proposed amendments will be voted upon.
- 7.2 It is the intent of these by laws to be entirely consistent with the statutory requirements of Title 26 Chapter 24 Utah Code Annotated 1953 as amended. In the event those statutes are later amended, the new statutory language shall supersede these by laws and those by laws shall be amended accordingly.

These By-Laws having been reviewed and amended at our regularly scheduled meeting of \_\_\_\_\_, 1986, are hereby adopted this \_\_\_\_\_ day of \_\_\_\_\_, 1986.

\_\_\_\_\_  
Calvin Giles, Chairman  
Wasatch City-County Board of Health





UTAH DEPARTMENT OF HEALTH  
DIVISION OF COMMUNITY HEALTH SERVICES  
BUREAU OF EPIDEMIOLOGY

Suzanne Dandoy, M.D., M.P.H.  
Executive Director

# COMMUNICABLE DISEASE NEWSLETTER

J. Brett Lazar, M.D., M.P.H., Director  
Division of Community Health Services

EDITOR: Craig R. Nichols, M.P.A., State Epidemiologist  
Director, Bureau of Epidemiology  
(801) 538-6191

MONTH August YEAR 1986

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2. Staff Changes
3. Monovalent Influenza A (H1N1) Vaccine, 1986-1987

## CONFIDENTIALITY AND DISEASE REPORTING

The Utah Department of Health is empowered by State Law (U.C.A. 26-6-3) to adopt rules and regulations for the "detection, reporting, prevention and control of communicable diseases and epidemic infections or any other health hazard which may affect the public health". Consequently, the "Code of Communicable Disease Rules and Regulations" was adopted February 1, 1982 to specify those diseases which must be reported to the local health department or the Utah Department of Health.

The rules and regulations do contain a list of reportable diseases (Section 2.1). In addition, realizing that newly recognized diseases or health hazards may threaten the public health, the rules are flexible and state that "any sudden or extraordinary occurrence of serious communicable disease is reportable" (Section 2.1), "any outbreak or undue prevalence of a disease, whether or not listed as reportable, shall be reported to the local health department or the Utah Department of Health" (Section 3.4) and "any unusual disease of epidemiological importance shall also be promptly reported to the local health department or the Utah Department of Health" (Section 3.5).

All suspect and confirmed cases of AIDS are reportable under authority of the above mentioned laws and regulations. Reports are confidential and not open to public inspection.

Rumors have circulated that a recent court decision has weakened the ability of the Department of Health to protect confidential data. The rumors are unfounded. In fact, court challenges have upheld the validity of reporting regulations.

An interesting discussion of the need for disease reporting was published in the New England Journal of Medicine (see, "Special Report, The Acquired Immunodeficiency Syndrome, Infection Control and Public Health Law, Vol. 314 No. 14, April 3, 1986 by M. Mills, C.B. Wofsy and J. Mills).

Any physician, hospital or clinic having concerns regarding disease reporting should contact their local health department or the Bureau of Epidemiology.



### STAFF CHANGES

Since the beginning of the year, several organization and staff changes have occurred in the Bureau of Epidemiology:

#### **Immunization Program:**

Kathy Burrows and Dorteia Lawson both resigned their positions; Joanne Sumner has replaced Dorteia as Office Technician for the Program. Patricia Weatherhogg has been hired to replace Kathy as Community Health Specialist and will begin work October 4, 1986.

#### **Sexually Transmitted Disease Control Program:**

Kathy Mejia left State employment when the Chlamydia Project was completed and Mike Kerr has been transferred to Alabama. A public health advisor will be named to replace Mike as Program coordinator; expected arrival is near the end of October. At present, Gregg Leeman, Public Health Advisor, recently assigned to the Salt Lake City-County Health Department STD Clinic will serve as acting coordinator for the STD Control Program while continuing his duties in Salt Lake County.

#### **AIDS Control Program:**

The AIDS Control Program was established April, 1986. All employees are new to the Bureau of Epidemiology:

Jessalyn Pittman	- Community Health Coordinator
George Usher	- Community Health Specialist
Norma Eaby	- Office Technician II

#### **Epidemiological Studies Program:**

Dennis Perrotta, Ph.D. has resigned his position as Coordinator effective September 24, 1986. He will move to Texas to assume a position as Director of the Division of Environmental Epidemiology with the Texas Department of Health.

Linda Shedd, Office Technician, will move to the Communicable Disease Control Program on September 22, 1986. She will be replaced by Cristie Chesler who is the current Communicable Disease Control Program Office Technician.



TABLE 5. Timing and dosage schedules for use of the supplemental 1986-1987 monovalent A(H1N1) influenza vaccine in conjunction with the 1986-1987 trivalent vaccine

AGE	INFLUENZA VACCINATION STATUS		ADDITIONAL VACCINATIONS
	Any Influenza Vaccine 1978/1979-1985/1986	Doses of 1986/1987 Trivalent Vaccine Received	Vaccination Schedule* for Future 1986/1987 Vaccination
6 mos.-12 yrs.	NO (unprimed)	NONE	Trivalent + monovalent simultaneously in 2 sites on each of 2 visits $\geq$ 4 wks. apart
		1	Trivalent + monovalent simultaneously in 2 sites $\geq$ 4 wks. after 1st trivalent
		2	Monovalent $\geq$ 4 wks. after trivalent
	YES (primed)	NONE	Trivalent + monovalent simultaneously in 2 sites
		1	Monovalent $\geq$ 4 wks. after trivalent
	DOESN'T MATTER	NONE	Trivalent + monovalent simultaneously in 2 sites
$\geq$ 13 yrs.		1	Monovalent $\geq$ 4 wks. after trivalent

\*If monovalent vaccine is not available when trivalent vaccine is scheduled, do not delay administration of trivalent vaccine. After at least one dose of the trivalent vaccine has been administered, only one dose of the monovalent vaccine will be needed. This may be given either simultaneously with the scheduled second dose of trivalent vaccine for a child receiving two doses of trivalent vaccine or 4 weeks or more after the last dose of trivalent vaccine administered.

It is anticipated that the supplemental monovalent vaccine will not be available until November-December 1986. If influenza A outbreaks begin to occur before vaccination, temporary chemoprophylaxis with the antiviral agent, amantadine, may be indicated. Recommendations for amantadine use for prophylaxis and treatment of influenza A infections have been published (5).

Information about the availability of the supplemental vaccine and the occurrence of influenza will be made available to state health officials by electronic communication and will be published in the *MMWR*.

#### RECOMMENDED DOSAGE OF SUPPLEMENTAL MONOVALENT INFLUENZA VACCINE

The 1986-1987 supplemental monovalent vaccine contains 15  $\mu$ g of A/Taiwan/1/86 antigen in each 0.5-ml dose. As with the standard trivalent vaccine, the recommended dosage of the monovalent vaccine should be reduced to 0.25 ml for children 6-35 months of age. Only split-virus vaccine, suitable for use in children or adults, will be manufactured. When administered simultaneously with the 1986-1987 trivalent vaccine, the vaccines should be given in separate sites (e.g., right and left deltoid or thigh). For more specific information, see the recommendations for 1986-1987 (5).

#### SIDE EFFECTS AND ADVERSE REACTIONS

Children aged 6-35 months will receive a total of 30.0  $\mu$ g of antigen when given both vaccines simultaneously, compared with 22.5  $\mu$ g when given trivalent influenza vaccine alone; children 3 years of age or older and adults will receive a total of 60.0  $\mu$ g of antigen when given both vaccines simultaneously, 45.0  $\mu$ g when given only the trivalent vaccine. Studies of the effect of different doses of influenza vaccine antigen administered to children and adults suggest that the amounts of antigen delivered by simultaneous administration of the trivalent and monovalent vaccines will result in no significant differences in the occurrence or severity of systemic adverse reactions compared with administration of trivalent vaccine alone (8-10).

More information on side effects and adverse reactions associated with inactivated influenza vaccine has been published (5).

(References are available upon request from the Bureau of Epidemiology, 538-6191.)

Reference: Centers for Disease Control, *Morbidity and Mortality Weekly Report*, Vol. 35/No. 32, August 15, 1986.



### **Monovalent Influenza A(H1N1) Vaccine, 1986-1987**

*These supplemental recommendations provide guidelines for a monovalent influenza A(H1N1) vaccine for protection against a newly emerged variant of influenza that has recently caused outbreaks among children and young adults in Asia. Guidance is provided for the use of this monovalent vaccine, which contains 15 µg of A/Taiwan/1/86(H1N1) antigen, as a supplement to the standard trivalent influenza vaccine. Recommendations for the use of the standard trivalent influenza vaccine for the 1986-1987 season and the use of antivirals for the prevention and treatment of influenza (MMWR 1986;35:317-26, 331) remain in effect and should be referred to in conjunction with this supplemental recommendation. The trivalent vaccine is intended to protect against currently circulating strains of influenza A(H3N2) and influenza B viruses and may provide partial protection against the new influenza A(H1N1) variant.\**

#### **INTRODUCTION**

Influenza A(H1N1) viruses circulated throughout the world from at least the mid-1930s until 1957, and many epidemics during this period were associated with severe illness and excess mortality (1). Influenza A(H1N1) viruses similar to a strain seen in 1950 reappeared in epidemic form in 1977, but outbreaks were detected only among children and young adults. In 1978-1979, when a U.S. epidemic was caused exclusively by type A(H1N1) virus, widespread outbreaks occurred among children and young adults, but no excess mortality was observed at the national level (1).

Influenza A(H1N1) viruses, like other human influenza viruses, have continued to undergo antigenic variation and have caused outbreaks in the United States during several winters, most recently that of 1983-1984. Since 1977, the incidence of illness associated with influenza A(H1N1) infection has been very low among older adults; such illnesses have generally been mild (2); and virtually no outbreaks have been detected among older age groups, even though the post-1977 antigenic variants have differed from those that circulated before 1957 (3). A temporal relationship between the occurrence of influenza A(H1N1) infections in the community and increased hospitalizations of older persons for acute respiratory disease (ARD) has been reported in one investigation (4); however, the severity of ARD (e.g., incidence of pneumonia) and the excess number of hospitalizations for ARD associated with influenza are not known. Furthermore, from 1982 to 1986, the laboratories collaborating in CDC's influenza virus surveillance program reported 1,049 influenza type A(H1N1) virus isolates, of which only six (0.6%) were obtained from persons aged 65 years or older. During the same period, 566 (22%) of 2,635 type A(H3N2) and 169 (9%) of 1,905 type B viruses were isolated from persons in this age group. This indicates that, although older Americans have had repeated exposure to all three currently circulating influenza strains, they do not have the same level of natural protection against illness caused by new variants of type A(H3N2) or type B viruses as they do against new variants of type A(H1N1) virus. Thus, it appears that, in influenza A(H1N1) epidemics since 1977, children and young adults have been particularly at risk of infection and illness and that the frequency of illness has decreased markedly among persons born before the mid-1950s. Nevertheless, some persons born before this time remain susceptible to infection and may have respiratory illnesses requiring medical attention.

\*Product information about influenza vaccines can be obtained from the following manufacturers: Connaught (vaccine distributed by Squibb)—(609) 921-4000; Parke-Davis—(800) 223-0432, Wyeth—(800) 321-2304.

Following the 1983-1984 influenza season, A(H1N1) strains were isolated infrequently in most parts of the world. The majority of A(H1N1) isolates in 1984 and 1985 continued to resemble the A/Chile/1/83 strain (which was first included in the trivalent influenza vaccine for 1984-1985), and A/Chile/1/83 was, therefore, chosen to remain the A(H1N1) component for the trivalent vaccine previously recommended for 1986-1987 (5). However, A(H1N1) viruses from influenza outbreaks in several Asian countries during March-May 1986 have recently been found to be poorly inhibited by antibody induced by the A/Chile/1/83 strain. In contrast, these viruses were all well inhibited by antisera to representatives of the new isolates. In addition, tests of antibody response induced by A/Chile/1/83 vaccine among children or adults showed four- to sixfold lower postvaccination geometric mean titers against representatives of the new variants than against A/Chile/1/83 (6,7).

It is not possible to predict how widely these new A(H1N1) variants will circulate in the United States during 1986-1987, nor the actual level of protection that A/Chile/1/83 vaccine will induce against them. However, it seems prudent to maximize protection of individuals at high risk of serious complications following influenza A(H1N1) infection in the event that these newer A(H1N1) viruses do cause major outbreaks in the United States. Vaccine manufacturers have, therefore, been requested to initiate production of a supplemental monovalent A(H1N1) influenza vaccine for use before the 1986-1987 season.

*Influenza A(H3N2) and type B viruses closely related to the strains in the 1986-1987 vaccine have continued to circulate throughout the world and may also appear in the United States during the 1986-1987 influenza season. The supplemental influenza A(H1N1) vaccine, unlike the 1986-1987 trivalent vaccine, will not contain representative antigens for virus types A(H3N2) and B. It is, therefore, imperative that the trivalent vaccine continue to be used as previously recommended (5). Programs for administration of the 1986-1987 trivalent vaccine to high-priority target groups should not be delayed, regardless of the time of availability of the supplemental A(H1N1) vaccine.*

#### **RECOMMENDATION**

Individuals under 35 years of age for whom influenza vaccination has been specifically recommended (5) should receive both the standard trivalent vaccine and the monovalent A/Taiwan/1/86(H1N1) vaccine.

Any high-risk person aged 35 years and older, or any other person who wishes to be immunized, may also receive the supplemental vaccine.

#### **PERSONS WHO SHOULD NOT BE VACCINATED**

Inactivated influenza vaccine of any kind should not be given to persons who have an anaphylactic sensitivity to eggs. Persons with acute febrile illnesses should not be vaccinated until their temporary symptoms have abated. For recommendations regarding the use of influenza vaccine during pregnancy, refer to the previously published recommendations for the control of influenza (5).

#### **TIMING OF INFLUENZA VACCINATION ACTIVITIES**

Recommendations for the timing of influenza vaccination activities with the trivalent vaccine for use in 1986-1987 have been published (5). *Those recommendations remain in effect. Additional recommendations below (Table 5) apply to persons receiving the supplemental A(H1N1) vaccine in conjunction with the 1986-1987 trivalent vaccine.*

Children aged 12 years or younger who have never received any influenza vaccine containing type A(H1N1) antigen (i.e., any influenza vaccine since 1978-1979) are considered unprimed and require two doses of the standard trivalent vaccine with an interval of at least 4 weeks between doses. The timing and number of monovalent A(H1N1) vaccine doses required will vary depending on whether the recipient has been primed by prior vaccination or infection and on the timing of doses administered for the current season (Table 5).

*If the supplemental monovalent vaccine is not available at the time vaccination programs would normally be undertaken, vaccination with the standard trivalent vaccine should not be delayed.*



WASATCH COUNTY  
CLASS SPECIFICATION

Salary Range #19 - 23,000

Title: Nursing Director  
Division: Public Health  
Department: Public Health

Grade Number: \_\_\_\_\_  
Effective Date: \_\_\_\_\_

GENERAL PURPOSE:

Administrative and professional nursing directed toward a total community or population group. To provide adequate supervision of public health nursing with the goal of safe, efficient, and effective delivery of basic public health programs for the promotion and maintenance of health and the prevention of illness.

SUPERVISION RECEIVED:

Works under the general guidance and direction of the public health director.

SUPERVISION EXERCISED:

Provide close supervision to nursing staff, public health volunteers and office secretarial personnel.

EXAMPLES OF DUTIES:

1. Assess and prioritize community health needs requiring public health nursing services and intervention.
2. Assigns duties and delegate responsibilities based on established public health concepts, community needs, staff knowledge and capabilities and program requirements.

3. Gather, organize and/or develop tools for use in standardizing delivery of nursing service (procedure manuals, clerical protocols, personnel job descriptions, performance standards, standardized documentation of services, etc.).
4. Monitor and review nursing time and activities to insure that state and local public health programs are carried out and completed within the established budgetary limits, time restraints and legal requirements (immunization, hypertension, child health, WIC, school health, communicable and epidemiology, etc.).
5. Attend State Meetings and review current program related literature from state and federal sources to keep nursing staff informed of pertinent programs and changes.
6. Prepare individual staff performance evaluations to determine achievement of standards and goals, eligibility for merit increases and qualification for promotion using direct observation and performance standards as guidelines.
7. Recommends hire, advancement, and termination of nursing personnel.
8. Provides support systems to Public Health nurses; organizes in-service education and staff meetings.
9. Provides emergency health services as a team member.
10. Conducts epidemiologic investigations.
11. Writes program proposals, grant applications, and budget plans.
12. Promotes and participates in research activities.
13. Has computer capabilities.
14. Performs related duties as required.

MINIMUM QUALIFICATIONS:

1. Education and Experience:

A. Graduate from a college or university with a bachelors degree in nursing; a nurse practitioner degree is preferred.

AND

B. One (1) year of experience as a Public Health Nurse or other related employment;

- OR -

C. An equivalent combination of education and experience.

2. Knowledge, Skills, and Abilities:

Considerable knowledge of the organization administration and supervision of Public Health Programs; considerable knowledge of nursing theory and practice; working knowledge of epidemiology and communicable disease; working knowledge of nutrition concepts; working knowledge of principles of teaching.

Ability to provide skill nursing care; ability to set priority and make judgments regarding care; ability to recognize community health needs and concerns of patients and to maintain constructive health care relationships; ability to communicate effectively verbally and in writing; ability to establish and maintain effective working relationships with employees, other agencies and the public.

3. Special Qualifications:

Must be licensed as a registered nurse in the State of Utah.

Colleen O'Connor

EXPERIENCE: Begin with your present or most recent job and describe all periods of employment, such as paid (full or part time), volunteer (full or part time), self employment, and/or military service. Account for your time during any intervals of unemployment other than when attending school. Attach additional sheets if necessary, using the same form.

EMPLOYER <i>University of Utah Medical Center</i>	TELEPHONE <i>581 2212</i>	FROM Mo. <i>1978</i> Yr. <i>1978</i> TO Mo. <i>Oct</i> Yr. <i>1984</i>
COMPLETE ADDRESS <i>50 No. Medical Drive S.E. 217</i>		LAST MONTHLY PAY \$ _____ HOURS PER WEEK <i>40</i>
YOUR TITLE <i>Surgery Supervisor</i>		SUPERVISOR'S NAME AND TITLE: <i>Helen Kee R.N. Director</i>
DUTIES <i>Directing &amp; Monitoring the Surgery schedule. Supervising &amp; assigning nursing personnel. Ordering special equipment for the medical staff</i>		
REASON FOR LEAVING OR SEEKING OTHER EMPLOYMENT: <i>to seek different type of nursing</i>		

EMPLOYER <i>Dr. Channing Hall Emergency Clinic</i>	TELEPHONE <i>644 7914</i>	FROM Mo. <i>Dec</i> Yr. <i>1985</i> TO Mo. <i>March</i> Yr. <i>1986</i>
COMPLETE ADDRESS <i>Park City Resort</i>		LAST MONTHLY PAY \$ _____ HOURS PER WEEK <i>40</i>
YOUR TITLE <i>Staff Nurse</i>		SUPERVISOR'S NAME AND TITLE: <i>Dr. C. Hall M.D.</i>
DUTIES <i>Assisting the Doctor's in emergency care of injured pts. Taking X RAY's of injured patients</i>		
REASON FOR LEAVING OR SEEKING OTHER EMPLOYMENT: <i>the clinic closes in the summer.</i>		

EMPLOYER <i>St. Mary's Hospital</i>	TELEPHONE <i>242 1550</i>	FROM Mo. <i>6</i> Yr. <i>1955</i> TO Mo. <i>1978</i> Yr. <i>1978</i>
COMPLETE ADDRESS <i>Patterson Road Grand Junction, Colo</i>		LAST MONTHLY PAY \$ _____ HOURS PER WEEK _____
YOUR TITLE <i>Surgery Supervisor</i>		SUPERVISOR'S NAME AND TITLE: <i>Sister M. Aloise</i>
DUTIES <i>Directing &amp; Monitoring the Surgery schedule Supervising &amp; assigning nursing personnel Ordering special equipment &amp; supplies for medical staff</i>		
REASON FOR LEAVING OR SEEKING OTHER EMPLOYMENT: <i>to return to Utah.</i>		

EMPLOYER <i>St. Agnes Hospital</i>	TELEPHONE <i>242 1550</i>	FROM Mo. <i>1950</i> Yr. <i>1950</i> TO Mo. <i>1955</i> Yr. <i>1955</i>
COMPLETE ADDRESS <i>Fresno California</i>		LAST MONTHLY PAY \$ _____ HOURS PER WEEK _____
YOUR TITLE <i>O.R. Staff Nurse</i>		SUPERVISOR'S NAME AND TITLE: <i>Sister Ann Patricia</i>
DUTIES <i>Working as a scrub nurse with surgeons performing surgery.</i>		
REASON FOR LEAVING OR SEEKING OTHER EMPLOYMENT: <i>my father's Health</i>		

EMPLOYER	TELEPHONE	FROM Mo. _____ Yr. _____ TO Mo. _____ Yr. _____
COMPLETE ADDRESS		LAST MONTHLY PAY \$ _____ HOURS PER WEEK _____
YOUR TITLE		SUPERVISOR'S NAME AND TITLE:
DUTIES		
REASON FOR LEAVING OR SEEKING OTHER EMPLOYMENT:		



(55) Nurse Interviews 8-21-86  
1 pm Coleen O'Connor  
Ready to Retire -  
Surgery - Scrub -  
Emergency  
Retiree  
Surgery  
Personality  
No - No public Health Service - No  
No - Grant writing - No  
→ Air Junction → H of H. Surgery -  
Personnel -  
Meetings - ea wk Grand Rds -  
Honored  
License  
Strong - Pt.  
Personality  
Educa  
Experience  
Answers  
(30) Sue Bangeter Barker - Wells  
Seminar - Disaster -  
Public Health Service Experience - Seeks Educa  
Computer Experience - Health Fair  
some  
Charge Nurse  
directing others

NAME & ADDRESS OF PERSON SUBMITTING SHEET		RELATION OF ABOVE TO WIFE		RELATION OF ABOVE TO HUSBAND		DATE SUBMITTED TO GENEALOGICAL SOCIETY		YES		NO	
NAME & ADDRESS OF PERSON SUBMITTING SHEET		RELATION OF ABOVE TO WIFE		RELATION OF ABOVE TO HUSBAND		DATE SUBMITTED TO GENEALOGICAL SOCIETY		YES		NO	
LDS ORDINANCE DATA											
BAPTIZED (Date)		ENDOWED (Date)		SEALED (Date and Temple) WIFE TO HUSBAND		SEALED (Date and Temple) WIFE TO HUSBAND		SEALED (Date and Temple) CHILDREN TO PARENTS		SEALED (Date and Temple) CHILDREN TO PARENTS	
HUSBAND		WIFE		HUSBAND		WIFE		HUSBAND		WIFE	
NECESSARY EXPLANATIONS											



# HUSBAND

Born \_\_\_\_\_ Place \_\_\_\_\_  
 Chr. \_\_\_\_\_ Place \_\_\_\_\_  
 Marr. \_\_\_\_\_ Place \_\_\_\_\_  
 Died \_\_\_\_\_ Place \_\_\_\_\_  
 Bur. \_\_\_\_\_ Place \_\_\_\_\_

Husband  
 Wife

Ward  
 Examiners: 1.  
 2.

Stake or  
 Mission

HUSBAND'S FATHER

HUSBAND'S  
 MOTHER

HUSBAND'S  
 OTHER WIVES

# WIFE

Born \_\_\_\_\_ Place \_\_\_\_\_  
 Chr. \_\_\_\_\_ Place \_\_\_\_\_  
 Died \_\_\_\_\_ Place \_\_\_\_\_  
 Bur. \_\_\_\_\_ Place \_\_\_\_\_

WIFE'S FATHER

WIFE'S  
 MOTHER

WIFE'S OTHER (11)  
 HUSBANDS

*John Walter JONES*

SEX M F	CHILDREN		WHEN BORN			WHERE BORN			DATE OF FIRST MARRIAGE		WHEN DIED
	List each child (whether living or dead) in order of birth		DAY	MONTH	YEAR	TOWN	COUNTY	STATE OR COUNTRY	TO WHOM	DAY	MONTH
Given Names	SURNAME										
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											

SOURCES OF INFORMATION

OTHER MARRIAGES

NOTE FAMILY GROUP SHEET WORK COPY ONLY.  
 "Do not send to the Genealogical Society."



## RESUME FOR

Ella Peterson

- 1958-1963: Worked at Utah Valley Hospital in the operating room performing the usual duties of an operating room nurse. In addition, I trained and oriented all the new operating room nurses.
- 1963-1964: Worked in operating room at LDS Hospital in Salt Lake City. I scrubbed in general surgery, plastic surgery, orthopedic surgery, and neuro-surgery. In addition, I scrubbed in the heart-lung room with Dr. Russell Nelson.
- 1965-1966: Worked in operating room in Great Falls, Montana. I always ran the surgical suite for the neuro-surgeon at his request.
- 1967: Worked in operating room in Billings, Montana.
- 1968: Worked the surgical floor in Miles City, Montana.
- 1969-1979: Full time parenting of five children. The most challenging and rewarding job of all!
- 1979-1985: Worked in Wasatch Medical Clinic for Dr. George Pitts. Did usual office work plus labwork such as-pregnancy test, throat culture, urine test, glucometer test, audio-test, tympanogram, drawing bloods, X-Ray, PKU, and of course blood pressure. I assisted with pap smear and minor surgery.
- 1986: I presently work in a psychiatric unit at the Utah State Hospital as the registered nurse in charge of the day shift.

We have lived in Wasatch County for 17 years and we view it as our home. The children have received all of their education in Wasatch schools. I have participated in PTA and helped the county nurse with immunization clinics and blood pressure clinics upon occasion. I enjoy this community and the people in it and would love to have an opportunity to work with and for them. Thank you.

on this

HUSBAND'S

Name (in full)

Wife

Marjorie Jane Etherton

TEMPLE ORDINANCE DATA

HUSBAND

Baptized

Endowed

(Relationship of Family Representative to Husband)

WIFE

Baptized

Endowed

Sealed to Husband

(Relationship of Family Representative to Wife)

BAPTIZED  
(Date)

ENDOWED  
(Date)

SEALED  
To Parents  
Date & Temple

David McKeith

St

May

St Mark's Hosp

community

yes

yes

on job train.

yes on job

no

house com

new class

Enjoy Teaching.

yes i am

attendants & ladies

2nd

of Educ -

available

Wife

Strong Point

4 yrs - 8 mos baby

1st



Genealogical  
Data  
For  
Husband

## HUSBAND

Birth \_\_\_\_\_ Place \_\_\_\_\_  
\*Chr. \_\_\_\_\_ Place \_\_\_\_\_  
Death \_\_\_\_\_ Place \_\_\_\_\_  
Burial \_\_\_\_\_ Place \_\_\_\_\_  
Father \_\_\_\_\_ Mother† \_\_\_\_\_  
Married \_\_\_\_\_ Place \_\_\_\_\_  
†Other Wives  
(if any) \_\_\_\_\_

Where was information shown  
family record obtained?  
1.

St Louis Mo.  
2. 1920 Obituary  
Hannah P. Etherton

Genealogical  
Data  
For  
Wife

## WIFE

Birth \_\_\_\_\_ Place \_\_\_\_\_  
\*Chr. \_\_\_\_\_ Place \_\_\_\_\_ of St Louis  
Death \_\_\_\_\_ Place \_\_\_\_\_  
Burial \_\_\_\_\_ Place \_\_\_\_\_  
Father \_\_\_\_\_ Mother† \_\_\_\_\_  
†Other Husb.  
(if any) \_\_\_\_\_

Family Representative:

Name and address of person  
furnishing this sheet.

R. RAYMOND GREEN,  
375 E. 2nd NORTH  
HEBER, UTAH

Birth date requested only in lieu of birth date  
(not L.D.S. Church Blessing).  
†List other wives or husbands in order of marriage.  
‡List complete maiden name for all females.FAMILY GROUP SHEET  
WORK COPY ONLY.  
"Do not send to the  
Genealogical Society."

NOTE!

Sex M F	CHILDREN List each child (whether living or dead) in order of birth	WHEN BORN			WHERE BORN		State or Country	DIED			MARRIED (First Husband or Wife List Additional Marriages with D Reverse Side of Sheet)
		Day	Mo.	Yr.	Town	County		Day	Mo.	Yr.	
	1										Date To
	2										Date To
	3										Date To
	4										Date To
	5										Date To
	6	4-7-65- 1-16-66			wrote Daisy Cooper for address						Date To
	7				" " " " "						Date To
	8										Date To
	9				grand dau. of James E & Hannah P. Etherton						Date To
	10										Date To
	11										Date To
	12										Date To
	13										Date To
	14										Date To
	15										Date To



David Lee McGrath  
3435 E. Creek Rd.  
SLC, Utah 84121  
Phone: 1(801)943-9716

#### Education

Graduate Olympus High School  
Graduated University of Utah, College of Nursing, June 1984  
Certified Emergency Medical Technician in State of Utah  
CPR Instructor, American Heart Association  
Advanced First Aid Instructor, American Red Cross  
I.V. Certified  
Completed Critical Care Courses I, and II

#### Work Experience

St. Marks Hospital, SLC, Ut., June 1984 to present  
General Duty Nursing, Med/Surg. floor  
Semi Intensive Care Nursing  
Emergency Room Nursing  
Community Education Instructor  
Advanced First Aid Instructor, University of Utah, Sept. 1978-85  
American Red Cross Advanced First Aid Instructor, June 1978-present  
American Heart Association CPR Instructor, April 1978-present  
Taught First Aid and CPR to Park City, Ski Interim Program for  
Ski Patrolmen, Winter 1981, 1982  
Volunteer, and Later Paid as an Aid, St. Marks Hospital in Physical  
Therapy, 1981  
Taught First Aid and CPR classes for Church, Schools, and Community  
groups  
Lakeview Hospital, Bountiful Ut., Oct. 1982- Dec. 1983  
General Duty Nursing, Medical Floor (as a student nurse)  
Star Brass Foundry, 1973-82 (except while serving LDS mission 1974-76)  
Star Brass Foundry, 1970-73 part time (high school)  
Have had some experience with computers, and can type.

Active in Church organizations

### General Mission Duties

Assistant to Mission President

Instructor

Administrative

Additional References available upon request.

## RESUME

Sue B. Barker  
1150 So. Mill Road  
Heber City, UT 84032  
654-1029

PROFESSIONAL OBJECTIVE: Wasatch County Public Health Nurse

QUALIFICATIONS: Excellent nursing education and training. Continually increasing education in the health profession by attending workshops and learning the latest techniques. Willing to accept new challenges and work hard. Effective in working with the general public. Work in all areas of the hospital: Pediatrics, Medical, Surgical, Obstetrics, Emergency Room, ICU/CCU, Geriatrics, and Charge Nurse. Served on Quality Assurance Committee and am now serving on the Nursery Committee. Have contributed new ideas on increasing continuity of care and staffing more efficiently. Broad knowledge in all areas of the nursing field.

EDUCATION: Registered Nurse, Brigham Young University, Provo, UT., 1979-1982.  
Transfer to BYU, Ricks College, Rexsburg, ID., 1978-1979.

NURSING EXPERIENCE:	1982-Present	Wasatch Co. Hospital 55 So. 500 E. Heber, UT. 84032	Registered Nurse
	1977-1982	Wasatch Co. Hospital 55 So. 500 E. Heber, UT 84032	Nurses Aide

COMMUNITY ACTIVITIES:	Present	Teaching Home Health Aides
	1986	CPR Instructor
		Assist with Wasatch County Health Fair
	1985	CPR Instructor
		Assist with Wasatch County Health Fair

REFERENCES: Available on request.

## MINUTES OF THE WASATCH CITY-COUNTY HEALTH DEPARTMENT

August 18, 1986

12:05 P.M.

County Services Complex

## Present were:

Calvin Giles	Chairman
Connie Tatton	Vice-chairman
R. Raymond Green, M.D.	Medical Officer
R. C. Tadd	Commissioner
Phil D. Wright, M.S., R.S.	Health Officer
Maxine Oakeson, R.N.	Nurse Supervisor
Ranae Williams, M.S., R.D.	Nutritionist/Educator
Maren Durstchi, R.N.	Nurse
Jeff Bradshaw	School Representative
Larry Carcelli, Ph.D.	Mental Health
Nelda Duke	Secretary
LeeRoy Farrell	Building Inspector
Robert Mathis	Planner

## Guests:

## Welcome:

Mr. Giles welcomed those present and called the meeting to order.

## Invocation:

Mr. Bradshaw offered the invocation.

## Minutes:

Minutes of the meeting held July 22, 1986 were read by Mrs. Duke. Mrs. Tatton made a motion minutes be approved as read. Mr. Giles seconded motion. Motion carried.

## Alcohol/Drug Report:

Mr. Giles excused Mr. Blanthorn who was attending training meetings. Mr. Wright stated he had met with a group at the Prevention Center in Park City regarding a Kaiser Grant proposal. This grant is for \$50,000 to \$150,000 p/y and will last 3-5 years if approved and must be in by 9/5/86. This grant will allow groups to get together and coordinate our attack on Alcohol/Drug problems and will branch out into other areas.

## Mental Health:

Mr. Carcelli reported his parenting group will begin again this Fall. He is pleased that many of his clients are now referring their friends for counseling. It was mentioned that the LDS Stakes in our county are putting a thrust into the Alcohol/Drug problem.

## WIC:

Mrs. Williams reported we now have 339 clients on our WIC program and we have had a state financial WIC audit this past week.

## Well Child Clinics:

Mrs. Oakeson reported we had only one well child clinic this month. We saw 11 children and referred 2 for further evaluation.

Immunization  
Clinic:

Mrs. Oakeson reported we gave 101 doses of vaccine this month. We also have the Hib vaccine available at \$7.00 per dose. She said we had received our flu vaccine and would like the board to set a fee for this vaccination. After some discussion Mrs. Tatton made a motion we charge \$4 p/dose for the flu shot. Mr. Giles seconded motion. Motion carried. A clinic will be set up soon for administering this vaccine.

School Health:

Mrs. Durtschi reported she will be doing a TB skin test on all new school teachers. She will have them come to our office for this service. It was decided there would be no charge to the teachers. It was suggested we invite the new school superintendent to our board meeting so he can become better acquainted with the health programs of the county.

Cancer Screening  
Clinic:

Mrs. Oakeson said the Cancer Screening Clinic will be held on August 20th. She is looking for volunteers to help run the clinic.

Open Burning:

Dr. Green said open burning of leaves and trash is beginning to be a problem for some of his patients. It was mentioned that open burning is against the county ordinances.

Occupancy  
Permit:

Mr. Giles welcomed Mr. Farrell and Mr. Mathis who had met with us to discuss the Occupancy Permit. Mr. Mathis gave a brief review of the present ordinances which seem to have conflicting regulations. It all refers back to what the health departments interpretation of an approved system is.

After some discussion it was suggested that members of the board meet with Attorney Tesch and the county commission at their next meeting to discuss this problem.

Midway Water  
Problem:

Mr. Wright reported that last Wednesday the Midway water began to cloud up and he immediately sent samples to the lab and state geologists were called in because it was coming from the spring. A boil order has been put on until the problem is solved. He will continue sampling until the water is satisfactory for drinking.

Storm Haven  
Water:

Mr. Wright reported he had received complaints that the residents in Storm Haven have been out of water because the well pump had gone out. He wrote a letter to the owner, Don Goodfellow, awhile back and told him to put his storage system in place but apparently he had not done this. As this is a community system the State will have to handle the situation.



Strawberry  
Water Users  
Facility:

Mr. Wright stated the Strawberry Water Users are in the process of running more percolation tests for their facility.

Daniel Summit  
Estates:

Mr. Wright said the developer of the Daniel Summit Estates is running into a problem in securing a 1500 foot protection zone for their spring.

Term  
Expiration:

It was noted that Mr. Rulon Phillips' term will expire next month. Mr. Wright will let the Wallsburg Town Board know so they can arrange for another appointment.

Forest Service  
Building:

Mr. Wright said the state had given approval for the Forest Service to install and alternate soils system.

Dead Animal  
Problem:

Mr. Giles and Mr. Wright reported they had met with those concerned regarding the dead animal problem. Attorney Tesch is now working on a legal document to handle this problem.

Next Meeting:

The next meeting was scheduled for Monday, September 15th at 12:00 noon in the County Services Complex.

Meeting adjourned at 2:30 P.M.

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Chairman





UTAH DEPARTMENT OF HEALTH  
DIVISION OF COMMUNITY HEALTH SERVICES  
BUREAU OF EPIDEMIOLOGY

Suzanne Dandoy, M.D., M.P.H.  
Executive Director

# COMMUNICABLE DISEASE NEWSLETTER

J. Brett Lazar, M.D., M.P.H., Director  
Division of Community Health Services

EDITOR: Craig R. Nichols, M.P.A., State Epidemiologist  
Director, Bureau of Epidemiology  
(801) 538-6191

MONTH September YEAR 1986

## CONTENTS

1. Cat Rabies-Washington County
2. New Recommended Schedule for Active Immunization of Normal Infants and Children
3. Immunization of Children Infected with Human T-Lymphotropic Virus Type III/Lymphadenopathy-Associated Virus

### CAT RABIES - WASHINGTON COUNTY

The first case of cat rabies reported in Utah was confirmed by laboratory examination of a cat from Washington County. A stray cat attacked and bit a man, a woman and a pet dog. Antirabies treatment has been initiated for the two individuals attacked by the cat as well as two persons exposed to blood and saliva from the cat. The dog and other cats living on the same property as the rabid cat have been captured and destroyed. The cat appeared ill and suffered from paralysis of the hind legs.

Rabies in terrestrial animals has been rare in Utah; most cases of rabies occur in bats. During the past 31 years (as of September 30, 1986), 165 (92.7%) of the 178 cases of animal rabies in Utah were found in bats. Rabies has also been confirmed in skunks (five cases), foxes (three cases), and one case each in a dog, sheep, horse, moose and now a cat. Prior to this recent feline infection, the last reported terrestrial case, a skunk, was documented in the St. George area during 1983.

In order to reduce the risk of human exposure to rabies, the following control measures are recommended by the Utah Department of Health:

1. All dogs and cats should be vaccinated against rabies commencing at three or four months of age and revaccinated according to local ordinance.
2. Stray dogs and cats should not be handled, but should be removed from the community by animal control officers.
3. Animals which appear to be sick or behave in an unusual manner should be reported to animal control officers and not handled by untrained persons.
4. All animal bites should be promptly reported to medical or health department personnel to determine the need for anti-rabies treatment.
5. Although vaccination of all livestock is not recommended, veterinary clinicians and owners of valuable animals may wish to consider rabies immunization for breeding stock or prize animals.

The Utah Department of Health does not consider a single case of feline rabies to be indicative of a rabies epizootic, but believes that precautions should be taken. The most likely source of rabies transmission among animals in southern Utah will be rabid skunks or wild carnivores. There is no need to avoid traveling or touring in southwestern Utah.



### New Recommended Schedule for Active Immunization of Normal Infants and Children

Until now, the recommended schedule for active immunization of normal infants and children called for administering combined measles-mumps-rubella (MMR) vaccine at 15 months and giving the fourth dose of Diphtheria and Tetanus Toxoids and Pertussis Vaccine (DTP) and the third dose of oral poliovirus vaccine (OPV) at 18 months (7). Two visits have been needed to receive these vaccines in the second year of life because the safety and efficacy of administering all three simultaneously had not been proven.\* A large, randomized, double-blind trial has recently been completed (2), and sufficient data are now available to recommend the simultaneous administration of MMR, DTP, and OPV to all children 15 months old or older who are eligible to receive these vaccines (Table 1).

In this trial, serologic response and clinical reaction rates following primary immunization with MMR were compared in a test group of 405 children given MMR simultaneously with DTP and OPV and a control group of 410 children given MMR followed by doses of DTP and OPV vaccine 2 months later. Seroconversion rates to each MMR component exceeded 96% in both groups, and the geometric mean titers achieved against the other six antigens were also similar in both groups. Rates of most of the common vaccine-associated clinical reactions to DTP and MMR were not augmented by simultaneous administration of these two vaccines. Some minor side effects were reported more frequently in the simultaneous-administration group; however, these differences were judged to be related to artifacts of the study design rather than to differences in the safety of the two vaccine schedules.

Data from CDC's Monitoring System for Adverse Events Following Immunization (MSAEFI) have been reviewed, particularly the information from Idaho, Louisiana, and Tennessee, where policies to administer MMR, DTP, and OPV simultaneously have been in effect for periods ranging from several months to years. Although there are limitations to the use of the MSAEFI data set for this purpose, the evidence suggests no increased risk of reactions associated with the simultaneous administration of these antigens.

Although the overall implications of simultaneous administration have not been fully defined, it is anticipated that implementation of this new schedule will result in at least three benefits: (1) a decrease in the number of health-care-provider visits required for immunization during the second year of life, (2) an accompanying decrease in costs, and (3) an increase in the percentage of children who will be fully or partially immunized by 24 months of age.

Some health-care providers may continue to prefer administering MMR at 15 months followed by DTP and OPV at 18 months, especially for patients who are known to be compliant with health-care recommendations or if other purposes are served by the additional visit. Such a schedule remains an acceptable alternative to the newly proposed schedule involving simultaneous administration of DTP, MMR, and OPV in a single visit.

\*It should be noted that simultaneous administration of MMR, DTP, and OPV was previously recommended for children who were behind schedule in receiving their immunizations. This recommendation was based on the demonstrated safety and efficacy of other vaccine combinations (e.g., DTP and measles, or MMR and OPV).

TABLE 1. New recommended schedule for active immunization of normal infants and children\*

Recommended age†	Vaccine(s)‡	Comments
2 months	DTP-1¶, OPV-1**	Can be given earlier in areas of high endemicity.
4 months	DTP-2, OPV-2	6-week to 2-month interval desired between OPV doses to avoid interference.
6 months	DTP-3	An additional dose of OPV at this time is optional for use in areas with a high risk of polio exposure.
15 months††	MMR,§§ DTP-4, OPV-3	Completion of primary series of DTP and OPV.
24 months	HbPV¶¶	Can be given at 18-23 months for children in groups who are thought to be at increased risk of disease, e.g., day-care-center attendees.
4-6 years***	DTP-5, OPV-4	Preferably at or before school entry.
14-16 years	Td†††	Repeat every 10 years throughout life.

\*See Reference 1 for the recommended immunization schedules for infants and children up to their seventh birthday not immunized at the recommended time in early infancy and for persons 7 years of age or older.

†These recommended ages should not be construed as absolute, i.e., 2 months can be 6-10 weeks, etc.

‡For all products used, consult manufacturer's package enclosure for instructions for storage, handling, and administration. Immunobiologics prepared by different manufacturers may vary, and those of the same manufacturer may change from time to time. The package insert should be followed for a specific product.

¶DTP-Diphtheria and Tetanus Toxoids and Pertussis Vaccine Adsorbed.

\*\*OPV-Poliovirus Vaccine Live Oral, contains poliovirus strains Types 1, 2, and 3.

††Provided at least 6 months have elapsed since DTP-3 or, if fewer than three DTPs have been received, at least 6 weeks since last previous dose of DTP or OPV. MMR vaccine should not be delayed just to allow simultaneous administration with DTP and OPV. Administering MMR at 15 months and DTP-4 and OPV-3 at 18 months continues to be an acceptable alternative.

§§MMR-Measles, Mumps, and Rubella Virus Vaccine, Live.

¶¶Hemophilus b Polysaccharide Vaccine.

\*\*\*Up to the seventh birthday.

†††Td-Tetanus and Diphtheria Toxoids Adsorbed (For adult use)—contains the same dose of tetanus toxoid as DTP or DT and a reduced dose of diphtheria toxoid.

#### References

1. ACIP: General recommendations on immunization. MMWR 1983;32:1-17.
2. Deforest A, Long FF, Lischner HW, et al. Simultaneous administration of measles-mumps-rubella (MMR) with booster doses of diphtheria-tetanus-pertussis (DTP) and poliovirus (OPV) vaccines (published data).

Reference: Centers for Disease Control, *Morbidity and Mortality Weekly Report*, Vol. 35/No. 37, September 19, 1986.



## **Immunization of Children Infected with Human T-Lymphotropic Virus Type III/ Lymphadenopathy-Associated Virus**

### **INTRODUCTION**

This document is intended to summarize available information and to assist health-care providers in developing policies for the immunization of children infected with human T-lymphotropic virus type III/lymphadenopathy-associated virus (HTLV-III/LAV),\* the virus that causes acquired immunodeficiency syndrome (AIDS). These policies may vary depending upon the prevalence of HTLV-III/LAV infection and the incidence of vaccine-preventable diseases in the community, individual assessment of a child's health status, and the risks and benefits of immunization in a particular situation. This discussion considers the risks and benefits of immunization for children residing in the United States based on the risks of vaccine-preventable diseases and the prevalence of HTLV-III/LAV infection and is intended for use by health-care providers in the United States. The recommendations may not pertain to other countries with different risks of vaccine-preventable diseases and prevalence of HTLV-III/LAV infection among children. Since these recommendations are based upon information and knowledge available at this time, periodic reassessment and revision will be required as more data concerning risk and benefits associated with immunization of HTLV-III/LAV-infected children become known and as the prevalences of specific vaccine-preventable diseases and HTLV-III infection change.

### **HTLV-III/LAV INFECTION AMONG CHILDREN**

In the period June 1, 1981-September 2, 1986, physicians and health departments in the United States reported 24,430 cases of AIDS to CDC (1). Three hundred forty-five (1%) of the case-patients were children under 13 years of age who met the AIDS case definition; 75% of these pediatric cases were reported from New York, Florida, New Jersey, and California. Children with less severe manifestations of HTLV-III/LAV infection (AIDS-related complex, or ARC) or with asymptomatic infections are not now reported to CDC, and no seroprevalence studies have been conducted among children. Thus, the number of less severely affected children and the number of infected but presently asymptomatic children are uncertain. In one recently published case series, 14 (48%) of 29 symptomatic HTLV-III/LAV-infected children met the CDC criteria for AIDS (2).

Fifty percent of children reported to CDC were diagnosed as having AIDS during the first year of life; 82%, by 3 years of age (1). Sixty-five percent of pediatric AIDS cases reported to CDC were fatal (3). Short-term fatality rates are lower for children with less severe disease (ARC) who have not developed opportunistic infections; however, the ultimate prognosis of these children and of asymptomatic infected children is unknown.

### **MECHANISMS OF TRANSMISSION OF HTLV-III/LAV AMONG CHILDREN**

Two risk factors are predominately associated with HTLV-III/LAV infection in children: a) being born to a mother who has HTLV-III/LAV infection, and b) receiving blood or clotting factors containing HTLV-III/LAV. Most case-patients (79%) are children whose mothers probably are infected with the virus. The major risk factors for infection of these women are

intravenous (IV) drug abuse and sexual contact with men at risk of HTLV-III/LAV infection (primarily through drug abuse or bisexual contacts); women of Haitian or central African origin are also at a higher risk of acquiring HTLV-III/LAV infection, and a small percentage of infected women have a history of being transfused with blood (4). Approximately 15% of pediatric AIDS case-patients have received transfusions of blood or blood products, and 4% have hemophilia and have been treated with clotting-factor concentrates. Information about risk factors is incomplete for 3% of children with AIDS.

Currently available data indicate that most pediatric HTLV-III/LAV infections are acquired from infected women during pregnancy, during labor and delivery, or perhaps shortly after birth. The risk of perinatal transmission from an infected mother to her infant is not known, although prospective studies indicate the rate of transmission has ranged from 0% (0/3) to 65% (13/20) (5-7). Seropositive women who had previously delivered an infected child had the highest of these transmission rates (65%) in subsequent pregnancies (5). In a retrospective study evaluating nine children whose mothers were later diagnosed as having AIDS, two (22%) children had antibody to HTLV-III/LAV (8). Additional prospective studies are needed to define more precisely the rate of perinatal transmission of HTLV-III/LAV.

### **PREVALENCE OF HTLV-III/LAV INFECTION AMONG WOMEN OF CHILD-BEARING AGE**

The prevalence of HTLV-III/LAV infection among women of child-bearing age varies depending on the patient group and geographic area (4). Reported confirmed seroprevalences are less than 0.01% among female blood donors in Atlanta and 0.06% among female U.S. military recruit applicants (4,9). In contrast, the reported prevalence of HTLV-III/LAV antibody among IV drug abusers has ranged from 2% to 59%, with the highest prevalence in New York City and northern New Jersey. Female sex partners of IV drug-abusing men with AIDS or with ARC had a reported seroprevalence of 40%-71%, whereas 10% of female partners of asymptomatic infected hemophiliacs were reported to be seropositive (4). Seroprevalence among prostitutes has varied greatly (5%-40%) depending on the geographic area and has been largely attributed to a coincidental history of IV drug abuse (4). Seroprevalence has been reported to be as high as 5% among persons born in countries in which heterosexual transmission of HTLV-III/LAV is thought to play a major role (e.g., Haiti, central African countries) (1,10,11).

### **IMMUNOLOGIC ABNORMALITIES ASSOCIATED WITH HTLV-III/LAV INFECTION**

Children with symptomatic HTLV-III/LAV infection (AIDS or ARC) have immunologic abnormalities similar to those of adult AIDS patients, including hypergammaglobulinemia, decreased T4 lymphocytes, reversed helper/suppressor T-cell ratios, poor T-lymphocyte responses to mitogen stimulation, and altered humoral immunity. Lymphopenia (cell counts less than 1,500 cells/mm<sup>3</sup>) is uncommon. Antibody responses of children with AIDS or ARC to diphtheria and tetanus toxoid boosters and to pneumococcal vaccine were absent or lower than those of age-matched controls, which is consistent with defective humoral immunity (12,13). Some HTLV-III/LAV-infected children responded adequately to immunization; 60% of AIDS and ARC patients given measles-mumps-rubella vaccine (MMR) prior to diagnosis had protective levels of measles antibodies 5-66 months after immunization (14).

Asymptomatic HTLV-III/LAV-infected adults as a group generally have less severe abnormalities of immunologic function than adults with AIDS or ARC, and some may have normal immunologic function, although individual asymptomatic adults may have severe abnormalities (15). Immunologic function of asymptomatic HTLV-III/LAV-infected children has not been adequately studied but presumably would be more intact than that of symptomatic HTLV-III/LAV-infected children. In a small prospective study, all 29 children with symptomatic HTLV-III/LAV infection had immunologic abnormalities within 5-13 months of being found infected, compared with only two of seven (29%) children reported to have asymptomatic HTLV-III/LAV infection (2).

\*The AIDS virus has been variously termed human T-lymphotropic virus type III (HTLV-III/LAV), lymphadenopathy-associated virus (LAV), AIDS-associated retrovirus (ARV), or human immunodeficiency virus (HIV). The designation "human immunodeficiency virus" (HIV) has been accepted by a subcommittee of the International Committee for the Taxonomy of Viruses as the appropriate name for the retrovirus that has been implicated as the causative agent of AIDS (Science 1986;232:697).



## CONCERNS ABOUT IMMUNIZATION OF HTLV-III/LAV-INFECTED CHILDREN

The immunologic abnormalities associated with symptomatic HTLV-III/LAV infection have raised concerns about the immunization of infected children. Replication of live, attenuated vaccine viruses may be enhanced in persons with immunodeficiency diseases and theoretical<sup>†</sup> may produce serious adverse events following immunization of symptomatic HTLV-III/LAV-infected (AIDS and ARC) patients (16). Concerns have been expressed on theoretical grounds that antigenic stimulation by immunization with inactivated vaccines might lead to a deterioration of clinical status of HTLV-III/LAV-infected children, but this effect has not been documented (17). Since symptomatic HTLV-III/LAV-infected patients have abnormal primary and secondary antibody responses, the efficacy of immunization may be decreased (18). The efficacy of immunization for asymptomatic HTLV-III/LAV-infected children is unknown, but presumably would be higher than for symptomatic HTLV-III/LAV-infected children.

Because most HTLV-III/LAV-infected children become infected perinatally, it is to be expected that their mothers are infected with HTLV-III/LAV. Other family members may also be infected with HTLV-III/LAV and may have abnormal immunologic function.<sup>†</sup> Prospective evaluation of 16 asymptomatic HTLV-III/LAV-infected mothers of children diagnosed as having AIDS or ARC showed that 12 (75%) mothers developed AIDS or ARC during a 30-month follow-up period (6). Regardless of the immune status of the recipient, poliovaccine virus is often excreted by children vaccinated with oral poliovaccine (OPV) and may be transmitted to close contacts (19). Immune-deficient individuals (either recipients or contacts) have a higher risk of developing vaccine-associated poliomyelitis than normal individuals. There is no risk of transmitting the viruses contained in measles, mumps, rubella (MMR) vaccine to family members (20-22).

While the risks of vaccination are not known with certainty, potential risks may exist if HTLV-III/LAV-infected children are not vaccinated. If local outbreaks of measles occur in geographic areas in which there is both a cluster of unvaccinated children and a high prevalence of HTLV-III/LAV infection, the risk of measles for unvaccinated, HTLV-III/LAV-infected children may be high. Measles infection among patients with immune deficiency may be severe, protracted, and fatal (23).

## EXPERIENCES WITH IMMUNIZATION OF HTLV-III/LAV-INFECTED PERSONS

Some children infected perinatally with HTLV-III/LAV have received routine immunization with OPV and MMR before their illnesses were recognized. Out-patient medical records from New York City and Miami for 213 children with symptomatic HTLV-III/LAV infection (AIDS and ARC), presumably acquired during the perinatal period, were reviewed to determine immunization history and possible vaccine-associated adverse events (24,25). One hundred seventy-one children (80%) had received at least one dose of OPV and diphtheria and tetanus toxoids and pertussis vaccine (DTP), 95 (45%) had completed primary immunization with OPV and DTP (three doses and four doses, respectively), and 63 (30%) had received MMR or measles vaccine. Thirty-eight (39%) of 98 children who had available records of dates of immunization and onset of symptoms consistent with HTLV-III/LAV infection had received at least one live-virus vaccine after symptom onset. No serious or unusual adverse events were noted in the medical records of these children following immunization.

Only one adverse event following immunization of an HTLV-III/LAV-infected person has been documented. A 19-year-old asymptomatic army recruit received multiple immunizations during basic training, including primary immunization with smallpox vaccine (26). Two and one-half weeks later, he developed cryptococcal meningitis and was diagnosed as having

AIDS. One and one-half weeks later, while being treated for meningitis, he developed lesions of disseminated vaccinia. He was treated with vaccinia immune globulin and recovered from vaccinia, but has since died of AIDS.

CDC has not received any reports of vaccine-associated poliomyelitis among HTLV-III/LAV-infected vaccine recipients or their contacts or among other persons known to be infected with HTLV-III/LAV. There have been no reports of serious adverse events following MMR administration from areas in which pediatric AIDS cases are occurring.

## IMMUNIZING CHILDREN WHO MAY BE INFECTED WITH HTLV-III/LAV: SPECIAL CONSIDERATIONS

Children born to women who are at risk of HTLV-III/LAV infection or who are known to be infected with HTLV-III/LAV should be evaluated for infection with the virus—including being tested for antibody (4,27). For asymptomatic children presenting for immunization, this evaluation and testing is not necessary to make decisions about immunizations. Children infected with HTLV-III/LAV are best cared for by pediatricians knowledgeable in the management of patients with this infection. Since little information is currently available on the safety and efficacy of immunizing children who may be infected with HTLV-III/LAV, special studies of these children need to be conducted.

[The conclusion of this article is continued on the reverse side of the 'Monthly Morbidity Summary'.]

<sup>†</sup>Such family members may have been infected by sexual contact with an HTLV-III/LAV-infected person, by parenteral exposure to infected blood (e.g., by sharing needles), or as hemophiliacs who received clotting factors, or by perinatal transmission.



## RECOMMENDATIONS

### Children with symptomatic HTLV-III/LAV infection

- A. Live-virus and live-bacterial vaccines (e.g., MMR, OPV, BCG) should not be given to children and young adults who are immunosuppressed in association with AIDS or other clinical manifestations of HTLV-III/LAV infection. For routine immunizations, these persons should receive inactivated poliovaccine (IPV) and should be excused for medical reasons from regulations requiring measles, rubella, and/or mumps immunization.
- B. Concerns have been raised that stimulation of the immune system by immunization with inactivated vaccines in these individuals might cause deterioration in immunologic function. However, such effects have not been noted thus far among children with AIDS or among other immunosuppressed individuals after immunization with inactivated vaccines. The potential benefits of immunization of these children outweigh the concerns of theoretical adverse events. Immunization with DTP, IPV, and *Haemophilus influenzae* type b vaccines is recommended in accordance with the ACIP recommendations, although immunization may be less effective than it would be for immunocompetent children (28-30).
- C. As with other conditions that produce chronic immunosuppression, the Committee recommends annual immunization with inactivated influenza vaccine for children over 6 months of age and one-time administration of pneumococcal vaccine for children over 2 years of age (31-33).
- D. Children and young adults with AIDS or other clinical manifestations of HTLV-III/LAV infection—as other immunosuppressed patients—may be at increased risk of having serious complications of infectious diseases, such as measles and varicella. Following significant exposure to measles or varicella, these persons should receive passive immunization with immune globulin (IG) or varicella-zoster immune globulin (VZIG), respectively (20,34).<sup>†</sup>

### Children with previously diagnosed asymptomatic HTLV-III/LAV infection

- A. A small number of children and young adults known to be infected with HTLV-III/LAV but without overt clinical manifestations of immunosuppression have received live-virus vaccines without adverse consequences. Further experience needs to be monitored, but on the basis of data now available, the Committee believes that such persons should be vaccinated with MMR in accordance with ACIP recommendations (20-22). Vaccinees should be followed for possible adverse reactions and for the occurrence of vaccine-preventable diseases since immunization may be less effective than for uninfected persons.

<sup>†</sup>Some physicians administer full replacement doses of intravenous IG on a 2-4 week schedule to children with AIDS and other clinical manifestations of HTLV-III/LAV infection. This therapy may provide some protection against such diseases as measles and varicella.

- B. Available data suggest that OPV can be administered without adverse consequences to HTLV-III/LAV-infected children who do not have overt clinical manifestations of immunosuppression. However, because family members of such children may be immunocompromised due to AIDS or HTLV-III/LAV infection and therefore at increased risk of parotitis from contact with spread vaccine virus, it may be prudent to use IPV routinely to immunize asymptomatic children with previously diagnosed HTLV-III/LAV infection (28).
- C. Immunization with DTP and *Haemophilus influenzae* type b vaccines is recommended in accordance with ACIP recommendations (29,30).

### Children not known to be infected with HTLV-III/LAV

Children and young adults not known to be infected with HTLV-III/LAV should be immunized in accordance with ACIP recommendations.

### Children residing in the household of a patient with AIDS

Children whose household members are known to be immunocompromised due to AIDS or other HTLV-III/LAV infections should not receive OPV because vaccine viruses are excreted by the recipient of the vaccine and may be communicable to their immunosuppressed contacts. These children should receive IPV for routine immunization (28). Because extensive experience has shown that live, attenuated MMR vaccine viruses are not transmitted from vaccinated individuals to others, MMR may be given to a child residing in the household of a patient with AIDS (20-22).

(References available upon request.)

Reference: Centers for Disease Control, Morbidity and Mortality Report, Vol. 35/No. 38, September 26, 1986.



# MONTHLY MORBIDITY SUMMARY

UTAH DEPARTMENT OF HEALTH  
SELECTED REPORTABLE DISEASES

APPROVAL #8000008  
APPROPRIATION # 2870 A33011

## PROVISIONAL DATA

Month SEPTEMBER 1986

County	Estimated Population 19 <u>85</u>	Colorado Tick Fever	Gonorrhea	Hepatitis (A, Non-A, Non-B, & Unspecified)	Hepatitis B	Influenza	Meningitis (Bacterial)	Meningitis (Non-bacterial)	Meningococcal Infections	Psittacosis	Rabies (Animal)	Rubella	Rubeola	Salmonellosis	Shigellosis	Syphilis (less than 1 year duration)	Tuberculosis (New Active & Relapse)	Tularemia
Beaver	5,050																	
Box Elder	36,600		1													1		
Cache	66,700		1											1				
Carbon	23,400																	
Daggett	700																	
Davis	171,000		16	4	1	16								3				
Duchesne	14,700																	
Emery	11,800																	
Garfield	4,050																	
Grand	7,050																	
Iron	19,400														1			
Juab	6,250																	
Kane	4,700										1							
Millard	14,200																	
Morgan	5,450																	
Plute	1,550																	
Rich	2,100																	
Salt Lake	690,000	63		10	2	12	2	1				1	3	7	16	1		
San Juan	12,500													1	3			
Sanpete	16,900																	
Sewer	16,200	1													1			
Summit	12,400	1																
Tooele	28,300																	
Uintah	24,000																	
Utah	251,000	3						1							9			
Wasatch	9,200														1			
Washington	35,700	1									1							
Wayne	2,100																	
Weber	156,000	12		2										4	1	2		
Utah State Total	1,649,000	0	99	14	5	28	2	2	0	0	2	1	3	16	32	4	0	0
This Mo. Last Yr.	SEPT. 1985	0	123	26	23	6	8	7	1	0	2	0	0	11	7	0	2	0
This Yr.To Date	1986	5	863	176	111	2012	56	24	9	0	5	14	12	97	97	24	28	1
Last Yr.To Date	1985	10	971	260	135	1990	80	40	9	0	4	0	0	77	73	8	12	2

Other Diseases:

AMEBIASIS 1; ASCARIASIS 1; CAMPYLOBACTER 3; CYTOMEGALOVIRUS 1; ENCEPHALITIS 1;  
GIARDIASIS 36; IMPETIGO 1; LEGIONNAIRES' DISEASE 1; MALARIA 1; PERTUSSIS 6;  
PNEUMONIA 1; RHEUMATIC FEVER 1; SCABIES 7; TYPHOID FEVER 1;

AIDS 1986 CUMULATIVE TOTAL 13

TOXIC SHOCK SYNDROME 1986 CUMULATIVE TOTAL 8



## MINUTES OF THE WASATCH CITY-COUNTY BOARD OF HEALTH

September 15, 1986

12:10 P.M.

County Services Complex

## Present were:

Calvin Giles	Chairman
Elizabeth Murdock	Member
Rulon Phillips	Member
R. Raymond Green, M.D.	Medical Officer
Phil Wright	Health Officer
Jeff Bradshaw	Ex-officio
Robert Blanthorn	Alcohol/Drug Director
Larry Carcelli	Mental Health
Maxine Oakeson	Nurse Supervisor
Sue Barker	Nurse Supervisor
Ranae Williams	Nutritionist/Educator
Maren Durtschi	School Nurse
LaVerne Jolley	Prevention Specialist
Nelda Duke	Secretary

## Welcome:

Mr. Giles welcomed those present called the meeting to order and introduced Sue Barker as the new Nurse Director and LaVerne Jolley as the new part-time Prevention Specialist.

## Invocation:

The invocation was offered by Mr. Giles.

## Minutes:

Minutes of the meeting held August 18, 1986 were read by Mrs. Duke. Mrs. Murdock made a motion minutes be approved as read. Mr. Phillips seconded motion. Motion carried.

## Alcohol/Drug report:

Mr. Blanthorn stated he was pleased to have LaVerne Jolley and Leslie Agutter working in his department. LaVerne has a degree in Special Education and Leslie has a Ph. D. and they will be working mostly in prevention. Mr. Blanthorn stated the grant from the Kaiser Foundation had been submitted and we will know in April if it has been accepted. This will be for prevention of alcohol and drug abuse as well as other aspects and will be separate from our alcohol/drug program. Mr. Blanthorn also stated he had had several crisis calls recently. His client load is low at present but he expects it to pick up soon.

## Mental Health:

Mr. Carcelli reported his case load is starting out heavy for this time of year and he will soon be starting his adolescent groups.



Nurses Report:

WIC: Mrs. Williams reported we now have 341 clients on our WIC program. She has been evaluating our Nutrition Education program and we are meeting most objectives.

Well Child: Mrs. Oakeson reported we saw 11 children in our Well Child clinic and referred one child for low hemocrit.

Immunization: Mrs. Oakeson stated we gave 173 immunizations last month.

Blood Pressure Checks: She also stated we checked 123 people for hypertension this month.

Cancer Clinic: Mrs. Oakeson reported there were 53 women who attended the Cancer Screening Clinic. Forty one were repeats with 12 new clients. Results of the screening will be forthcoming.

School Health: Mrs. Durtschi reported she is doing vision screening in the Midway school. She has done T. B. tests on 24 new school employees and there are still some to do.

Health Officers  
Report:

Dead Animal Problem: Mr. Wright said we had made progress with our dead animal problem. Regulation 4-26-1 states it is the responsibility of the owner to dispose of their dead animals within two days and after that it is the county or city's responsibility and the owner will be billed. After meeting with the county attorney and the commissioners the following procedures will be followed:

There will be a \$30 charge to dispose of large animals in the land fill or \$15 if Mr Keeling is called to pick it up. It will cost \$10 to dispose of a small animal in the land fill or \$2 if Mr. Keeling takes care of it. Mr. Keeling has been advised if he is not paid he is to turn the bill over to the sheriff and he will issue a citation. Beginning October 1st the land fill will start operating at regular hours.

Dead Deer Problem: Mr. Wright stated he had sent a letter to the Division of Wildlife Resources regarding the problem of dead deer being left on our highways to decompose. He received an answer stating it was the Department of Transportation's responsibility to take care of this problem. We will follow up on this problem.

Midway Water: Mr. Wright gave a brief review of the Midway water problem. The boil order is now off and they have installed a chlorinator until the turbidity clears. They will keep sampling often until this problem is rectified.

Bureau of Reclamation Projects: Mr. Wright stated the Bureau of Reclamation is installing an alternate sewage system at their complex on East Highway 40. They will have to line the canal and use the Heber East Stake Center well for a back up system in case they do not get water from the well they are now drilling. He also stated the Bureau will have to pump sewage at their complex in Strawberry Valley and will have to raise their existing system.

Timberlakes Platt # 18: Dr. Green reported he attended the Planning Commission meeting in which Timberlakes asked for approval for Plat 18. Because of the slide area they approved 26 out of 76 lots. A lot by lot analysis will have to be done on the other 50 lots.

Daniel Summit Estates: Mr. Wright said they had run soils tests on the 16-lot sub-division at Daniel Summit Estates. Most tests look good. The second phase of the project will be a restaurant, shops, cabins, etc on the other side of the highway. This area is marginal in some areas.

Flood Plain Proposal: Mr. Giles said a flood plain proposal is being done in the county. Most landowners are in favor of this project.

Water and Wastewater Regulation: Mr. Wright said Attorney Tesch and the commissioners felt comfortable with our decision to not allow building permits until water and wastewater tests are approved. This needs to be written in a regulation and a hearing set up to put it into effect.

Swimming Pools: Mr. Wright said he received a complaint from the State Health Department that some people had picked up staff infection from swimming pools. He mentioned our county does not have a sampling system for swimming pools. After some discussion Dr. Green made a motion we send a letter to all swimming pool operators and have them sample their pools at least once a month while operating. Mrs. Murdock seconded motion. Motion carried.

Swiss Days:

Mr. Wright said he had very little cooperation with operators of food service booths for Midway Swiss Days. They had practically no sanitation facilities to handle their food. He wrote them a letter. (See copy #1).

Liability  
Insurance:

Mr. Wright said the question of liability insurance has come up throughout the state. In checking in our county we do not carry liability insurance. After some discussion Mrs. Murdock made a motion Mr. Wright be given authority to check into this insurance problem. Dr. Green seconded motion. Motion carried.

By-Laws:

The board briefly reviewed the by-laws and Dr. Green made a motion we adopt the by-laws. Mr. Phillips seconded motion. Motion carried.

Meeting was adjourned at 2:00 P.M.

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Chairman

# copy #1 WASATCH CITY-COUNTY HEALTH DEPARTMENT

## BOARD MEMBERS

CALVIN GILES - CHAIRMAN  
COUNTY

CONNIE TATTON - VICE CHAIRMAN  
MIDWAY

ELIZABETH MURDOCK - MEMBER  
HEBER

RULON PHILLIPS - MEMBER  
WALLSBURG

LYNN WEBSTER - MEMBER  
CHARLESTON

R. RAYMOND GREEN, MD - MEDICAL OFFICER  
HEBER CITY

R. C. TADD - CHAIRMAN  
COUNTY

805 WEST 100 SOUTH  
HEBER CITY, UTAH 84032  
PHONE (801) 654-2700

September 5, 1986

## STAFF

PHIL D. WRIGHT, M.S., R.S.  
HEALTH OFFICER

MAXINE MCAFFEE, R.N.  
NURSING DIRECTOR

MAREN DURTSCHI, R.N.  
COMMUNITY HEALTH NURSE

RAEAE WILLIAMS, R.D.  
NUTRITIONIST/EDUCATOR

ROBERT BLANTHORN, M.S.W.  
ALCOHOL/DRUG DIRECTOR

NELDA DUKE  
OFFICE MANAGER

Dear

We congratulate you on another fine Swiss Days celebration. As a health department however, we have some concerns that need to be addressed.

- 1) Temporary food stands are restricted foods that require limited preparation. For preparation such as cutting of lettuce, onions and other produce is not allowed in the food stand. You do have a central kitchen where this could be accomplished or the products could be purchased from supply houses pre-chopped.
- 2) Hand dipping of ice cream is not permitted unless you have the proper facilities. An ice cream dripper well with running water could be provided in the small room on the north side of the church house.
- 3) There needs to be some modification to the kitchen in the Town Hall. A three-compartment stainless steel sink, a hand wash sink, a vegetable sink (could be one compartment in the three-compartment sink), racks to keep food off from the floor, screens over open windows etc. This needs to be done before next years event.
- 4) People in the food booths need to be better informed about food handling. Hands need to be washed when starting work or when hands become contaminated. Hair nets or caps must be worn by all employees handling foods. The health



copy 11

-2-

department is willing to give a pre-celebration class on proper food handling procedures if you so desire.

We feel that Swiss days is a great asset to the county. We would like to offer our help and expertise in helping you provide good, safe food items.

Please let me know if we can help in any way.

Thank You,

Phil D. Wright, M.S., R.S.  
Health Officer



UTAH DEPARTMENT OF HEALTH  
DIVISION OF COMMUNITY HEALTH SERVICES  
BUREAU OF EPIDEMIOLOGY

Suzanne Dandoy, M.D., M.P.H.  
Executive Director

# COMMUNICABLE DISEASE NEWSLETTER

J. Brett Lazar, M.D., M.P.H., Director  
Division of Community Health Services

EDITOR: Craig R. Nichols, M.P.A., State Epidemiologist  
Director, Bureau of Epidemiology  
(801) 538-6191

MONTH October YEAR 1986

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2. Haemophilus influenzae  
Type b (Hib) Vaccine
3. Coping With AIDS

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## FOODBORNE BOTULISM

The first case of foodborne botulism reported in Utah during 1986 was recently confirmed in a 66-year-old female from Weber County. Shortly after the consumption of home-canned salsa, the patient experienced abdominal cramps and pain. Additional symptoms (blurred vision, slurred speech, muscle weakness) developed over the next three days. The patient's condition deteriorated until the evening of the third day when she was hospitalized. At the time of admission, the patient, in addition to the symptoms mentioned above, was also found to have sluggish pupils and central nervous system signs compatible with botulism. The patient was experiencing no respiratory distress upon admission but was later placed on a ventilator.

The probable source of botulinum toxin was confirmed as the home-canned salsa. The salsa, a blend of tomatoes, peppers, onions and spices, had not been pressure cooked during the canning process. Type A toxin was isolated from the salsa and the patient's stool.

Following the diagnosis, trivalent botulism antitoxin was sent via air freight from the San Francisco Quarantine Station. (For procedures on release of antitoxin, see the Communicable Disease Newsletter, July 1986.)

Since 1983, there have been three cases of foodborne botulism reported in Utah residents. Previous cases were associated with home-canned curry and home-canned green peppers. None of the food items had been processed by pressure cooking. All cases were associated with Clostridium botulinum type A toxin.

Foodborne botulism can be prevented by proper processing of home-canned food items. Processing temperatures must be adequate for elimination of botulinum spores. In general, high acid foods may be canned by boiling; but all others should be canned in pressure cookers at the appropriate heat or pressure level for the required length of time. Home canners should consult reputable canning guides or contact the local office of the Utah State University Extension Services for proper canning techniques.



# HAEMOPHILUS INFLUENZAE TYPE b (Hib) VACCINE

Haemophilus influenzae type b (Hib) is the most common cause of bacterial meningitis in the United States. The Hib bacteria is also recognized as the cause of other invasive diseases, including epiglottitis, bacteremia, cellulitis, septic arthritis, osteomyelitis, pericarditis, endocarditis, and pneumonia. By five years of age, one of every 200 children in the United States will have had a systemic infection due to Hib. The following table illustrates Hib meningitis morbidity and mortality in Utah for a three-year period:

## Haemophilus influenzae type b (Hib) Meningitis Utah, 1983 - 1985

	<u>1983</u>	<u>1984</u>	<u>1985</u>
1. Total cases of bacterial meningitis	81	111	109
2. Total cases of Hib meningitis	64	76	76
3. Percent of total bacterial meningitis caused by Hib	79.0%	68.5%	69.7%
4. Cases/deaths of Hib meningitis by age			
<18 Months	42/8	47/0	43/4
18-23 Months	4/0	6/0	8/0
2 Years	7/0	11/0	10/2
3 Years	3/0	5/1	6/0
4 Years	4/1	3/0	1/0
5 Years	1/0	0/0	1/0
6+ Years	3/0	3/0	4/2
Unknown	0/0	1/0	3/0
Total	64/9	76/1	76/8

The figures listed above illustrate that the majority of Hib meningitis cases occur in children less than 18 months of age (57% in 1985). Unfortunately, the presently available vaccine is not appropriate for children in this age group. However, there is still significant morbidity in children between 18 months and 5 years of age.

The first polysaccharide vaccine against systemic Hib disease was licensed in the United States in April 1985. Currently there are three U.S. manufacturers/distributors of Hib vaccine: Mead Johnson (b-Capsa I), Connaught (HibVax), and Lederle Laboratories (HibImune).

Hib vaccine is recommended<sup>(1,2)</sup> for all children at 24 months of age, including those who previously experienced invasive disease. For those who did not receive the vaccine at this age, immunization through the fifth year of life (i.e., until 60 months of age) is indicated (except for those who had invasive Hib disease at 24 months of age or older). The risk of invasive Hib disease decreases



with increasing age over the age of two years. Because the vaccine is safe and effective, physicians may wish to immunize previously unvaccinated healthy children between two and five years of age to prevent the Hib disease that does occur in this age group. The potential benefit of this strategy in terms of cases prevented declines with increasing age of the child at the time of vaccination. Therefore, children 2-3 years of age who attend day care facilities should be given a higher priority than day care attendees who are 4-5 years old.

Immunization of children at 18 months, particularly those in known high-risk groups (i.e. day care center attendees, children with anatomic or functional asplenia, and malignancies associated with immunosuppression), may be considered. Since the vaccine is not likely to be as effective in this age group as in older children, physicians and parents should be informed that a second dose of the vaccine should be given at age 24 months (providing the second dose is given not less than 2 months after the initial dose).

According to the American Academy of Pediatrics, new vaccines against Hib currently are being evaluated. Preliminary evidence suggests that capsular polysaccharide conjugated to one of several protein antigens is considerably more immunogenic than the polysaccharide alone in all age groups. A field trial of one of these conjugate vaccines is currently in progress to determine safety and protective efficacy in infants during the first year of life.

#### References:

- 1 Centers for Disease Control, Morbidity and Mortality Weekly Report. Polysaccharide Vaccine for Prevention of Haemophilus influenzae Type b Disease. Vol. 34/No. 15, April 19, 1985.
- 2 American Academy of Pediatrics, Report of the Committee on Infectious Diseases. Twentieth Edition, 1986.

#### COPING WITH AIDS

The National Institute of Mental Health has published a booklet entitled, Coping With AIDS, which is intended to familiarize health and mental health professionals and paraprofessionals with the psychological and social problems associated with acquired immunodeficiency syndrome (AIDS). Single copies of the booklet are available from local health departments or the Bureau of Epidemiology. The following recommendations have been abstracted from the document and provide insight regarding the mental health needs of patients with AIDS.

"In general, the best treatment builds on the person's past coping abilities, capitalizes on strengths, maintains hope, and shows continued human care and concern. At the time of their diagnosis and throughout the course of treatment, patients should be given up-to-date information about AIDS, its causes, modes of transmission, treatments available, and sources of care and social support. They



should also be alerted to common types of misinformation about HTLV-III infection, ARC (AIDS Related Complex), and AIDS. Health care professionals must recognize and discuss the patient's fears realistically, but should not give false reassurance.

"Suicidal thoughts and plans should be discussed openly to allow the patient to ventilate feelings of despair. Gauging the seriousness of suicidal intent is also important. Staff is justified in becoming ever more alarmed as the patient's suicidal preoccupations gel into concrete plans (especially when a gun or other means are at hand), and when plans are carried out in actual suicide attempts.

"Appropriate medications for both anxiety and depression should be considered; because many of these drugs cause drowsiness, they may be administered at bedtime for patients having trouble sleeping. Feelings about homosexuality or drug-taking habits, guilt over being a source of contagion, and anger at discrimination and stigmatization should also be explored. Intravenous drug abusers should be offered treatment.

"Patients with progressive disease should also be urged to discuss their feelings about the illness and encouraged to express fear, anger, and depression. They should, of course, be treated with concern and compassion and assured that everything will be done to provide continuity of care and relief from distress. Many patients feel less anxious about upcoming medical procedures when a nurse or other staff member exactly describes what the experience will entail.

"For patients who are afraid of being abandoned, frequent visits from friends, families, or health care workers should be arranged. Support groups based on the model of cancer support groups are likely to be beneficial.

"In some areas of the country, home care programs provide 24-hour attention and monitoring of symptoms and their associated pain, nausea, and labored breathing. If such programs are available, health care workers may wish to help organize friends and family--whomever the patient feels comfortable with--to provide physical and emotional interventions and support.

"The patient's concerns over imminent death should be discussed. The person with AIDS needs the opportunity to call upon clergy for spiritual support, to obtain legal assistance, especially in preparing a will, and to give directions for care during terminal stages, notification of clergy and family, and funeral arrangements. Patients who are rapidly losing mental acuity should be encouraged to appoint a legal guardian as soon as possible, before they are declared legally incompetent."





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DIVISION OF COMMUNITY HEALTH SERVICES  
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# COMMUNICABLE DISEASE NEWSLETTER

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## HEPATITIS B IN DAY CARE CENTERS<sup>1</sup>

Although hepatitis A is a well-documented problem in day care centers, transmission of hepatitis B virus (HBV) has not been reported in this setting. Hepatitis A in day care centers results from efficient enteric transmission in a setting of inadequate or rudimentary personal hygiene, and it causes large outbreaks involving primarily diapered children and their adult contacts. Because hepatitis B is not transmitted by the enteric route, efficient disease transmission resulting in large outbreaks is extremely unlikely. Nevertheless, person-to-person transmission of HBV has been known to occur in some settings (in the home or in institutions for the mentally handicapped) so some risk may exist for HBV transmission in a day care setting. Furthermore, there has been increased awareness of the high risk of HBV carriage in certain groups of children (southeast Asian refugees, adoptees from HBV-endemic countries) and an increased demand for placement of children in day care settings. These two factors have raised concern about disease risk by both day care operators and public health authorities.

To date, few studies have directly addressed the risk of HBV transmission in a day care setting. The only study of which we are aware failed to demonstrate disease transmission from a 21-month-old hepatitis B surface antigen (HBsAg)-and hepatitis B e antigen (HBeAg)-positive carrier child to 15 children and 6 staff exposed in a day care classroom over a 17-month period (E.O. Shapiro, personal communication). Because of the paucity of direct data, recommendations must be based on known mechanisms of disease transmission and on analysis of similar settings that have been studied more intensively.

HBV is transmitted via percutaneous or permucosal exposure to infective blood or other body secretions from an HBsAg-positive person. In the United States, HBV is spread most commonly via shared needles, sexual exposure, or through blood exposure in the workplace. HBV transmission may occur in settings involving close personal contact, such as within the family or in institutions for the mentally handicapped, in which direct parenteral exposure is difficult to document. In such settings, disease transmission may involve direct contact with blood via shared toothbrush, or razor, percutaneous contact with saliva (from bites), or contact of open skin wounds or mucosal surfaces with virus via environmental contamination. Blood- and serum-derived fluids contain highest quantities of virus--1000 times higher than saliva--and are probably the predominant vehicles for virus transmission in this setting. Saliva contains lower quantities of virus, and, although it has been shown infective in bite exposures and by parenteral inoculation in experimental animals, transmission following oral exposure (such as shared musical instruments) has not been documented.



Two situations in the day care setting require consideration: risk of transmission from an HBsAg-positive staff member to children, and risk of transmission from an HBsAg-positive child to either staff or other children. The risk of HBV transmission by an HBsAg-positive day care staff member may be considered negligible if appropriate hygienic standards are maintained. HBV transmission from teachers to children has not been documented in any school setting. Furthermore, HBV transmission from infected staff to patients in the health care setting has only occurred when an HBV carrier routinely does traumatic procedures on patients (allowing portal of virus entry) and has dermatitis or has experienced trauma to her- or himself that would allow virus to contaminate open patient wounds. In day care centers, appropriate precautions for an HBV-infected caretaker should include washing after accidents that cause bleeding, and covering open skin wounds that might weep serous fluid and contaminate the environment. Prophylaxis for children or other staff with HB vaccine or hepatitis B immunoglobulin is not indicated.

The risk of HBV transmission by an infected child is very low if appropriate hygienic standards are maintained. Disease transmission requires three conditions: high infectivity of the child (HBeAg positivity); a portal of exit of virus from the carrier (trauma with bleeding, open skin lesions, drooling or mouthing objects); and a portal of entry into susceptible children (open skin lesions or trauma). With the exceptions of aggressive behavior (biting), specific bleeding disorders (hemophilia) or frank breaches of accepted hygiene (sharing of toothbrushes), opportunities for disease transmission in day care centers are few. Mouthing of objects by children, especially those under age 3 years, is one area of concern; however, as noted previously, the risk of disease transmission via this pathway is probably very low.

Currently, the most practical approach to preventing HBV transmission in day care centers is the institution of appropriate hygienic standards. Such standards should be maintained in all day care centers. Serologic testing for HBV and vaccination of classroom contacts are not recommended. Specific recommendations include counseling staff and parents about potential pathways of disease transmission; instituting careful personal hygiene for all children as well as the HBsAg carrier; and emphasizing cleanliness of the environment. All children should be discouraged from placing others' fingers in their mouths or their own fingers in others' mouths, from sharing food or toiletry items (e.g., toothbrushes), and mouthing objects that others might use. Open skin lesions that might ooze serum should be covered. Items soiled by blood or saliva of the carrier should be thoroughly cleaned before reuse or should be discarded. Blood-contaminated objects should also be disinfected. If the carrier child exhibits abnormally aggressive behavior such as biting or frequent scratching of others, then other precautions may be necessary, such as vaccination of classroom contacts or exclusion from a group day care setting.

These recommendations are made in the face of minimal specific data on disease risk in day care centers. Collection of data on HBV transmission is critically needed. Since children infected with HBV are rarely symptomatic, studies that use serologic testing will be necessary to assess risk. Prospective studies that assess risk over time will provide the most valuable and practical information.



### DENGUE FEVER<sup>1</sup>

As anticipated, the transmission of dengue fever has continued to increase throughout the Americas. Epidemics have been reported during the past year in Aruba (Netherlands Antilles), Brazil, Columbia, Dominican Republic, Mexico, Nicaragua, and Puerto Rico.

Dengue fever is a viral disease transmitted by urban Aedes mosquitoes. The illness is characterized by sudden onset, high fever, severe headache, joint and muscle pain, and rash. The rash appears 3-4 days after onset of fever and may spread from the torso to arms, legs, and face. The disease is usually benign and self-limited, although recovery may be prolonged. Many cases of sub-clinical infection occur, but rarely, dengue may present as a severe and fatal hemorrhagic disease.

The vector mosquito feeds primarily on humans during the daytime and most frequently is found near human habitations. Larval habitats include artificial water containers such as discarded tires, cans, barrels, buckets, flower vases, and cisterns.

The risk of dengue infection for the international traveler appears to be small; however, travelers to endemic areas should take precautions to avoid mosquito bites. Travelers can reduce their risk of acquiring dengue by remaining in well-screened areas when possible. Outdoors, exposure to mosquitoes can be reduced by wearing clothing that adequately covers the arms and legs and by applying mosquito repellent.

<sup>1</sup> Adapted from Centers for Disease Control, Advisory Memorandum No. 89, June 28, 1986 and Summary of Health Information for International Travel, November 7, 1986.

### STD COORDINATOR

Mark Long, Public Health Advisor, has been assigned to the Utah Department of Health by the Centers for Disease Control and will serve as Coordinator of the Sexually Transmitted Disease Control Program.

Mr. Long, a native of Virginia, graduated from Old Dominion University. He has been employed by the Centers for Disease Control since 1977 and has worked in New York City, St. Louis, San Francisco and Nashville.

### SEASON'S GREETINGS

Best wishes for a happy holiday season and a healthy New Year from the staff of the Bureau of Epidemiology.

Duane Call	Byron Haslam	Paul Schlosser
Cristie Chesler	Lilly Lakin	Linda Shedd
Rick Crankshaw	Gregg Leeman	Joanne Sumner
Linda Crump	Mark Long	Eunice Taylor
Norma Eaby	Craig Nichols	Ed Tierney
Louise Eutropius	Jessalyn Pittman	George Usher
Naomi Gibson	Ilene Risk	Pat Weatherhogg



## Surveillance of Hemophilia-Associated Acquired Immunodeficiency Syndrome

As of September 15, 1986, a total of 238 cases of hemophilia-associated acquired immunodeficiency syndrome (AIDS) have been reported to CDC through state health departments, hemophilia treatment centers (HTCs), and physicians. Of the 238 patients, 212 (89%) had hemophilia A (coagulation factor VIII deficiency); 16 (7%), hemophilia B (factor IX deficiency); seven (3%), von Willebrand's disease; two, an acquired inhibitor (antibody) to factor VIII; and one, a factor V deficiency. All but seven (3%) of the patients were male. Thirteen patients were known to have had other risk factors for AIDS in addition to a hematologic disease. The 238 patients resided in 38 states; almost half lived in California, New York, Pennsylvania, New Jersey, or Missouri. The total number of cases represents a cumulative incidence of 1.6 cases of AIDS/100 hemophiliacs in the United States (1).

The first AIDS patient with underlying coagulation disorders was diagnosed as having *Pneumocystis carinii* pneumonia in 1981. Later it was recognized that this patient had AIDS. Since then, the number of hemophilia-associated AIDS cases has increased each year. The reported number of cases among hemophiliacs does not appear to be increasing at an exponential rate (Figure 1); however, in 1985, 92% of persons with hemophilia A and 52% of those with hemophilia B in a U.S. hemophilia cohort had antibodies to human T-lymphotropic virus type III/lymphadenopathy-associated virus (HTLV-III/LAV)\*, suggesting exposure to the virus or to virus particles (2). HTLV-III/LAV seropositivity in this cohort was associated with declining  $T_{\text{helper}}$  lymphocyte numbers and with declining  $T_{\text{helper}}$ -to- $T_{\text{suppressor}}$  cell ratios. Because of these high rates of seroprevalence and immunology findings, concern had been expressed that the recent incidence of hemophilia-associated AIDS may be misleadingly low because of a decline in reporting.

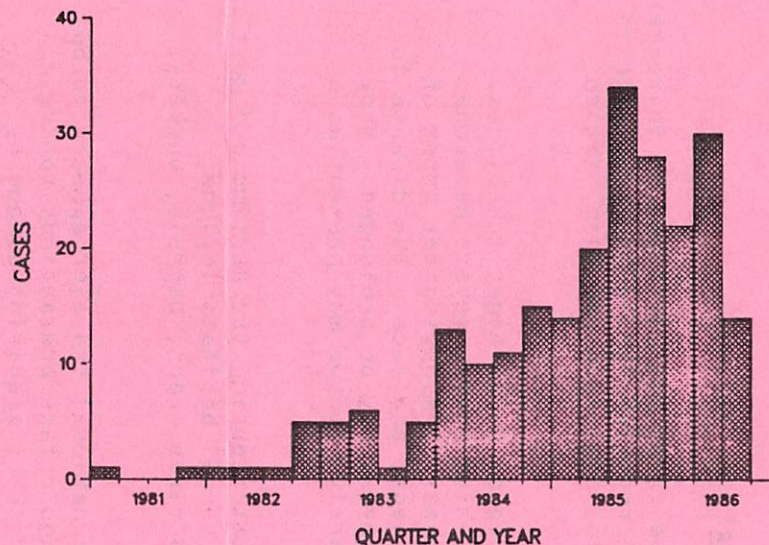
To determine the completeness of reporting, the Division of Host Factors (DHF), Center for Infectious Diseases, CDC, and the National Hemophilia Foundation (NHF) surveyed all United States HTCs, local NHF chapters, and physicians known to have patients with hemophilia (3). On May 14, 1986, each HTC/physician was sent a list of persons with hemophilia-associated AIDS according to DHF records as of May 1, 1986. Since patients' names are not used at DHF, cases were identified only by the patient's date of birth, the date of diagnosis, and the nature of the AIDS diagnosis. The HTCs/physicians were asked to add to this list any other known cases—confirmed or suspected—among persons with hemophilia. DHF personnel telephoned all HTCs/physicians who had not responded by August 1, 1986.

A total of 240 HTCs/physicians and 34 NHF chapters were sent letters, and written responses were received from 61 (25%) HTCs/physicians. Information was obtained by telephone from 209 of the 213 addressees who had not responded; four NHF chapters could not be reached. In addition, DHF personnel contacted the state health departments of three states that had no reported cases and no HTCs or physicians listed in the NHF directory. From these efforts, eight previously unreported cases of AIDS among persons with hemophilia were identified. Two patients were from California (diagnosis of AIDS 12/84 and 7/85); two were from Oregon (diagnosis of AIDS 3/86 and 7/86); and one each from Colorado (diagnosis of AIDS 3/85), Missouri (5/85), New York (4/85), and Virginia (1/86). In four instances, the physicians assumed that the cases had been reported to the appropriate state health departments. In the other instances, two cases involved physicians who did not realize their legal responsibility to report cases of AIDS to the state; one case involved a postmortem diagnosis of opportunistic infection, of which the physician had been unaware; and one case involved an acquired inhibitor to factor VIII, which the physician did not realize constituted a case of hemophilia-associated AIDS.

Reported by National Hemophilia Foundation and associated Hemophilia Treatment Centers; Div of Host Factors, Center for Infectious Diseases, CDC.

\*The AIDS virus has been variously termed human T-lymphotropic virus type III (HTLV-III/LAV), lymphadenopathy-associated virus (LAV), AIDS-associated retrovirus (ARV), or human immunodeficiency virus (HIV). The designation "human immunodeficiency virus" (HIV) has been accepted by a subcommittee of the International Committee for the Taxonomy of Viruses as the appropriate name for the retrovirus that has been implicated as the causative agent of AIDS (Science 1986;232:697).

FIGURE 1. Cases of hemophilia-associated acquired immunodeficiency syndrome, by quarter of diagnosis — United States, January 1, 1981-September 15, 1986\*



\*Recently diagnosed cases may not be included because of a lag time in reporting.

**Editorial Note:** National surveillance for AIDS cases among persons with hemophilia is maintained through the receipt of standard AIDS case report forms submitted by the state health departments to CDC and through reports (without names) sent directly to DHF by physicians and nurses who care for patients with hemophilia. In the latter case, information is immediately shared with the state health department. The eight unreported cases identified in the CDC-NHF survey represent approximately 3% of all reported hemophilia-associated AIDS cases in the United States. This approximates the percentage of such cases that were reclassified according to the case definition for AIDS revised in 1985 (4).

In interpreting the findings of this survey, it should be noted that approximately 50%-60% of persons with hemophilia in the United States receive care through HTCs or hematologists (CDC data, unpublished). However, this selection bias probably does not significantly distort the results of the survey, because hemophiliacs at greatest risk for contracting AIDS, i.e., those who require extensive concentrated clotting-factor replacement (5), are most likely to be followed by these health care providers. The survey could not determine willingness/unwillingness to perform confirmatory diagnostic procedures such as esophagoscopy or lung biopsy in the hemophiliac population. Conversations with HTC personnel and physicians, however, suggest that confirmatory procedures are usually done. Finally, this approach to validation of the surveillance system assumes that physicians who do not initially choose to report AIDS cases (e.g., for reasons of confidentiality) would do so when contacted personally. This may not be the case. Nevertheless, the survey described here and other studies (6,7) suggest that surveillance of AIDS (as currently defined)—particularly of hemophiliacs—is relatively complete.

[References available upon request.]

Reference: Centers for Disease Control, *Morbidity and Mortality Weekly Report*, Vol. 35/No. 43, October 31, 1986.